,

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match
Listing first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence:
                                      o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ched:
       1121
1131
1151
1151
1151
1151
1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB DB
                                                                                                                                                                                                                                                                                                                           154
154
154
154
153.8
153.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                   234
234
234
234
234
228.8
228.8
227.8
     37.45
37.45
35.83
34.83
34.83
34.83
34.83
34.83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              seq length: 0 seq length: 1000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              •
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleic search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
Match
                                                                                                                                                         1000
97.88
97.88
65.22
66.22
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
66.23
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N_Geneseq_36:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  June 19, 2000, 17:48:25; search time 94.16 Seconds (without alignments) 621.760 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-232-880-45
234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 311585 seqs, 125096042 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acaacagacccttgctcgct.....taagctctatgacccgctgt 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length DB
     4.5
5
                                                                                                                                                                     V84589
Q20501
Q05152
Q06342
T49864
T44111
T13316
                                                                                                                                                                                                                                                                                                                                                                                              V61250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   V58522
V61168
V58644
V61249
V11855
                                                                                                                                                                                                                                                                                             X16295
V42925
                                                                                                                                                                                                                                                                                                                                               V61251
V58648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   V58647
V61252
                                                                                                                                                                                                                                                                                                                                                                                                                                 X41114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IJ
                                                                                                                                                                                                                                                                                                                             V61253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mode]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 623170
                                                                                                                                                                                                 cDNA sequence of p
Human kallikrein e
DNA encoding a hum
Human secreted pro
Encodes fibrinogen
Snake venom ancrod
Encodes ancrod-lik
Callosellasma rhod
                 Human amyloid
Sequence encod
                                                                                                                                                                                                                                                                                                                                                           Prostate tumour sp cDNA sequence of p
                                                                                                                                                                                                                                                                                                                                                                                            Prostate tumour sp cDNA sequence of p
                                                                   Encodes fibrinogen
Rat programmed cel
                                                                                                    Bovine trypsin gen
                                                                                                                                    A. contortrix prot
                                                                                                                                                                         Korean Viper Salmo
                                                                                                                                                                                         Human NES1 cDNA.
                                                                                                                                                                                                                                                                                                             cDNA sequence of
Human kallikrein
                                                                                                                                                                                                                                                                                                                                           Prostate tumour sp
                                                                                                                                                                                                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cDNA sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cDNA sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Prostate tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Prostate tumour sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens Tub
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Prostate tumour sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cDNA sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                            sequence of p
n prostate-spe
n secreted pro
                                                   stratum corn
yloid prec
encoding
oin gene Ge
```

RESULT V61168 ID V6

V61168 standard; cDNA; 234

ВP

181

121

181 tgaacgtgtcggtggtgtctgaggaggtctgcagtaagctctatgacccgctgt

234

180

TGAACGTGTCGGTGTCTGAGGAGGTCTGCAGTAAGCTCTATGACCCGCTGT

121 gcctcgtttctggctggggtctgctgctggcgaacggcagaatgcctaccgtgctgcagtgcg

GCCTCGTTTCTGGCTGGGGTCTGCTGGCGAACGGCAGAATGCCTACCGTGCTGCAGTGCG

61 AGTCTGACACCATCCGGAGCATCAGCATTGCTTCGCAGTGCCCTACCGCGGGGAACTCTT 120

agtctgacaccatccggagcatcagcattgcttcgcagtgccctaccgcgggggaactctt 120

61

Query Match Best Local Sim Matches 234;

h 100.0%; Similarity 100.0%; 34; Conservative (

0

Score 234; DB 1; Pred. No. 2.4e-61; Mismatches 0;

Length 234; Indels

0;

Gaps cg 60

88888888888	OS NG ARG ARG ELA COS NG ARG ARG ARG ARG ARG ARG ARG ARG ARG AR	RESULT V58522 ID V AC V AC V AC P KW P	
This se be used prostat able to encoded portion monitor also be cancers sequency	Homo s W09837 27-AUG 25-FEB 09-FEB 01-AUG (CORI- (CORI- 0111on WPI; 9 NOVE; 1014im	ULT 1 522 V58522; V58522; 08-DEC- Prostat	8 8 8 8 8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
This sequence represents be used in the method of prostate cancer comprises able to bind an immunoge encoded by this sequence portion of the prostate portion of of the prostate also be conjugated to a cancers.  Sequence 234 BP; 43	Homo saptens.  Homo saptens.  WO9837418-A2.  27-AUG-1998; U03690.  25-FEB-1998; US-806596.  01-AUG-1997; US-806596.  01-AUG-1997; US-904809.  CCORI-) CORIXA CORP.  1110n DC; XU J;  WPI; 98-480805541.  WOVEI human prostate spec for detecting and treatin claim 1; Page 56; 141pp;	. o o ⊢ o	311 311 311 311 311 311 311 311 311 311
uence reprint the met cancer cobind an imby this se of the propressio conjugated	ARIXA ARIXA ARIXA B. UI B. UI B. UI C. VI C.	m Ci	11111111111
uence represent in the method of cancer compriss bind an immunogaby this sequence of the progression of conjugated to a 234 BP; 4	U03590. US-904809 US-90480 US-904809 US-90480 US-90480 US-90480 US-90480 US-90480 US-90480 US-90480 US-90480 US-90480 US-90480 US-90480	rd; cD (first ur spe ur spe	
sents od of prises unoger luence; tate [ of, of, of to a t		; cDNA; 234 irst entry) specific g	741 744 744 744 732 807 1438 1526 988 362 790
the conic )  or the protection then had been depended as the conic of	enq enq	34 Bp gene	
This sequence represents a human prostate tumour speci; be used in the method is; prostate cancer comprises contacting a biological samplable to bind an immunogenic portion of a prostate protein encoded by this sequence). An antibody which binds to portion of the prostate protein, and the method can be monitor progression of, or treat prostate cancers. The also be conjugated to a therapeutic agent for use in the cancers.  Sequence 234 BP; 43 A; 68 C; 68 G; 55 T;	00. 65596. 14809. 14809. RP. ate specific tumour protein treating prostate cancers	ALIGNMENTS 44 BP. 29 gene clone P20. 30 gene; human; prostate	N81633 T03999 T04000 T044001 T1553487 T15535 T79126 C2070500 V38294 V24548
ate tumour spe biological sa a prostate produced by which binds the method can ne method can te cancers. I ent for use in	and	te cancer;	
quence represents a human prostate tumour specific gene, and can in the method of the invention. The method is for detecting earner comprises contacting a biological sample with an agent bind an immunogenic portion of a prostate protein (such as by this sequence). An antibody which binds to an immunogenic of the prostate protein, and the method can be used to detect, progression of, or treat prostate cancers. The antibody may conjugated to a therapeutic agent for use in therapy of prostate 234 BP; 43 A; 68 C; 68 G; 55 T;	fragments - useful	r; detection;	Human spleen tryps Human pancreatic t Human pancreatic t DNA encoding Zyme DNA encoding Tat c Human serine prote Protease M, a nove Encodes fibrinogen Human C-C Chemokin Trypsinogen-like p

```
B
                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                      β
                                                                                                                                                                                                                                                                                                                                                       δÔ
                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCC STIRIUS ARGERIA COCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Ma
Best Loc
Matches
                                                             25-FEB-1998; U03690.
09-FEB-1998; US-904809.
25-FEB-1997; US-806596.
01-AUG-1997; US-806809.
(CORI-) CORIXA CORP.
Dillon DC, Xu J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.

WO9837093-A2.

27-AUG-1998.

25-FEB-1998; US-020956.

09-FEB-1997; US-806099.

01-AUG-1997; US-904804.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Polypeptides comprising immunogenic portions of prostate proteins - used in a vaccine for the treatment of prostate cancer Claim 3; Page 53-54; 130pp; English.

The present sequence is a new DNA which encodes an immunogenic port of a prostate tumour protein. The encoded immunogen, or the DNA its can be used as a vaccine for the treatment of prostate cancer. The was identified by analysis of a subtracted cDNA library with a normal subtracting a prostate tumour cDNA expression library with a normal tissue cDNA library.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    V61168;
06-JAN-1999 (
cDNA sequence
WPI; 98-480805/41.
P-PSDB; W69387.
Novel human prostate specific tumour for detecting and treating prostate claim 1; Page 112; 141pp; English.
This sequence represents a human pro
                                                    Dillon
WPI; 98
                                                                                                                                                                                                                                          V58644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Prostate;
Homo sapie
                                                                                                                                                                             Prostate tumour therapy; ss. Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CORI-) CORIXA CORP. Dillon DC, Xu J; WPI; 98-609886/51.
                                                                                                                          WO9837418-A2.
27-AUG-1998.
                                                                                                                                                                                                            Prostate
                                                                                                                                                                                                                      08-DEC-1998
                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                            _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match
                                                                                                                                                                                                                                                                                                                                   gcctcgtttctggctggggtctgctgctgcgaacggcagaatgcctaccgtgctgcagtgcg
                                                                                                                                                                                                                                                                                                                                                                                                                                acaacagacccttgctcgctaacgacctcatgctcatcaagttggacgaatccgtgtccg
                                                                                                                                                                                                                                                                                          agtctgacaccatccggagcatcagcattgcttcgcagtgccctaccgcgggggaactctt
                                                                                                                                                                                                                                                                                                                                                                                                                     ACAACAGACCCTTGCTCGCTAACGACCTCATGCTCATCAAGTTGGACGAATCCGTGTCCG
                                                                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             h 100.0%;
Similarity 100.0%;
34; Conservative (
                                                                                                                                                                                                            tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer;
                                                                                                                                                                                                                      (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
e of prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP;
                                                                                                                                                                                              first entry)
r specific gene c
r specific gene;
                                                                                                                                                       Location/Qualifiers 217. .696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 43 A;
                                                                                                                                                                                                                                          1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tumour clone P20
                                                                                                                                                                                                                                           ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 234; DB 1;
Pred. No. 2.4e-61;
; Mismatches 0;
                               tumour
                                                                                                                                                                                                           clone
                                                                                                                                                                                                  human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 83
 prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ü
                     r protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunogen;
                                                                                                                                                                                                          DEI
                                                                                                                                                                                                 prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
  tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ຸດ
                                and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           clone;
                                                                                                                                                                                                  cancer;
 specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SS
                                                                                                                                                                                                  detection;
 gene,
                                                                                                                                                                                                                                                                                             234
                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 portion
A itself,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                  Š
                                      밁
                                                          Q
 밁
```

254 61

0;

Indels

0;

Gaps

0

313 60

agtotgacaccatcoggagcatcagcattgottogcagtgocctaccgcgggggaactott

AGTCTGACACCATCCGGAGCATCAGCATTGCTTCGCAGTGCCCTACCGCGGGGAACTCTT

Н

```
VIVIOLE PRESENTATION OF THE PRESENTATION OF TH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ρ
  Query Match
Best Local S
Matches 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                             (CORI-) CORIXA CORP.
Dillon DC, Xu J;
WPI; 98-609886/51.
p-PSDB; W71871.
                                                                                                                                                         Polypeptides comprising immunogenic portions of prostate proteins used in a vaccine for the treatment of prostate cancer Claim 3; Page 104; 130pp; English.

The present sequence is a new DNA which encodes an immunogenic portion of a prostate tumour protein. The encoded immunogen, or the DNA itsection be used as a vaccine for the treatment of prostate cancer. The Is was identified by analysis of a subtracted cDNA library with a normal subtracting a prostate tumour cDNA expression library with a normal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    be used in the method of the invention. The method is ror detecting prostate cancer comprises contacting a biological sample with an agent able to bind an immunogenic portion of a prostate protein (such as encoded by this sequence). An antibody which binds to an immunogenic portion of the prostate protein, and the method can be used to detect, monitor progression of, or treat prostate cancers. The antibody may also be conjugated to a therapeutic agent for use in therapy of prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         V61249
V61249;
                                                                                                                 subtracting a prostate tissue cDNA library. Sequence 1248 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                      25-FEB-1998; U03492.
09-FEB-1998; US-020956.
25-FEB-1997; US-806099.
01-AUG-1997; US-904804.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Prosta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence of tate; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gcctcgtttctggctggggtctgctggcgaacggcagaatgcctaccgtgctgcagtgcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCTCGTTTCTGGCTGGGGTCTGCTGGCGAACGGCAGAATGCCTACCGTGCTGCAGTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.
11 Similarity 100.
234; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
                            Similarity
  100.
illarity 100.
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
e of prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  prostate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1248
                                                                                                                   288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            288
                         0
9
9
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tumour clone P703 sp
vaccine; immunogen;
                                                                                                                 A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ?
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
  Score 234; I
Pred. No. 3.8
); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 234; I
Pred. No. 3.8
); Mismatches
                                                                                                                 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          424
                                                                                                                 ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ç
DB 1;
.8e-61;
s 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
.8e-61;
s 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  splice variant
n; clone; ss.
                                                                                                                 <u>ن</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                portion
A itself,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

```
δõ
                                DЪ
                                                         δÃ
                                                                                     DЪ
                                                                                                                δÃ
                                                                                                                                               В
                                                                                                                                                                                                                                                                            2888888
                                                                                                                                                                                                                                                                                                                                                                               RESULT
V11855
                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                   Claim 10: Fig 1: 120pp; English.

The sequence is that of the Tub Interactor gene hTI-1 which codes for a putative serine protease. TI genes function in biochemical pathways involved in weight control and related disorders. The products can be used for treating weight disorders, e.g. obesity, cachexia or anorexia nervosa, or a related disorder such as diabetes. The products can also be used to modulate cell cycle progression and apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens Tub Interactor (hTI-1) gene.

serine protease; tub interactor; treatment; obesity; cachexia; serine protease; tub interactor; treatment; obesity; cachexia; anorexia nervosa; diabetes; cell cycle progression; apoptosis; neurodegenerative disease; Alzheimer's disease; drug screening; Parkinson's disease; Huntington's chorea; detection; diagnosis; amylotrophic lateral sclerosis; spinocerebellar degeneration; se
                                                                                                                                                                                                                                                                                                     disease, Parkinson's disease, Huntington's chorea, amylotrophic lateral sclerosis or spinocerebellar degenerations. The products can also be used for detection, diagnosis and
                                                                                                                                                                                                                                                                                      drug screening
                                                                                                                                                                                                                                                                                                                                       They can be used for treating neurodegenerative diseases which are characterised by apoptosis, including Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MILL-) MILLENNIUM PHARM Errada PR, Gimeno CJ; WPI; 98-217246/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAR-1998.
05-SEP-1997; U15627.
07-JUL-1997; US-897340.
17-SEP-1996; US-715032.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P-PSDB; W59129.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   V11855 standard;
     181
                                  354
                                                                                        294
                                                                                                                                               234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          l1-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    374
                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                      Local Sin
hes 234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     b interactor genes obesity, cachexia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 G
                                            gcctcgtttctggctggggtctgctgctggcgaacggcagaatgcctaccgtgctgcagtgcg
                                                                                  acaacagacccttgctcgctaacgacctcatgctcatcaagttggacgaatccgtgtccg
tgaacgtgtcggtgtctgaggaggtctgcagtaagctctatgacccgctgt 234
                                                                                                                                           ACAACAGACCCTTGCTCGCTAACGACCTCATGCTCATCAAGTTGGACGAATCCGTGTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tgaacgtgtcggtggtgtctgaggaggtctgcagtaagctctatgacccgctgt 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGAACGTGTCGGTGTCTGAGGAGGTCTGCAGTAAGCTCTATGACCCGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gcctcgtttctggctggggtctgctgctgcgaacggcagaatgcctaccgtgctgcagtgcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCTCGTTTCTGGCTGGGGTCTGCTGGCGAACGGCAGAATGCCTACCGTGCTGCAGTGCG
                                                                                                                                                                                                  Similarity 100.
34; Conservative
                                                                                                                                                                                                                                                                          1386 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2. .701
/*tag= a
/product= hTI-1 protein
/note= "putative serine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA;
                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       anorexia nervosa or related
                                                                                                                                                                                                                                                                            318 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INC
                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   to develop products for the treatment
                                                                                                                                                                                                         Score 234; Db 1,
No. 3.9e-61;
                                                                                                                                                                                                                                                                                                   detection,
                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                          490 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protease"
                                                                                                                                                                                                                                                                                                  diagnosis and
                                                                                                                                                                                                                                                                         321
                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                         ູດ
                                                                                                                                                                                                                            Length
                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     disorders e.g.
                                                                                                                                                                                                                                                                         249
                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         487
                                                                                                                                                                                                  Gaps
                                                                                                               120
                                                                                                                                           293
                                                                                    353
                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433
                                                                                                                                                                                                  0
```

PROSEDER

Prostate; cancer;

prostate;

tumour c

clone P703

splice variant

V61252; 06-JAN-1999 (first entry)

Homo sapiens. WO9837093-A2. 27-AUG-1998. 25-FEB-1998; U

U03492

RESULT V61252

V61252

standard;

CDNA;

1167

ВP

뮍

383

TGAACGTGTCGGTGTCTGAGGANGTCTGCAGTAAGCTCTATGACCCGCTGT

```
ğ
           δÃ
                                     밁
                                                                             . 망
                                                                                                         δÃ
                                                                                                                                  뫄
                                                                                                                                                         ş
                                                                                                                                                                                                                                            RESULT
V58647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                              Query Match 97.8
Best Local Similarity 98.3
Matches 230; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                             W09837418-A2.
27-AUG-1998; U03690.
25-FEB-1998; US-904809.
25-FEB-1997; US-806596.
01-AUG-1997; US-904809.
                                                                                                                                                                                                                                                              Novel human prostate specific tumour protein and fragments - useful for detecting and treating prostate cancers
Claim 1; Page 115; 141pp; English.
This sequence represents a human prostate tumour specific gene, and car be used in the method of the invention. The method is for detecting prostate cancer comprises contacting a biological sample with an agent able to bind an immunogenic portion of a prostate protein (such as encoded by this sequence). An antibody which binds to an immunogenic portion of the prostate protein, and the method can be used to detect, monitor progression of, or treat prostate cancers. The antibody may also be conjugated to a therapeutic agent for use in therapy of prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Prostate tumour specific prostate tumour specific therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                              Dillon DC, Xu J;
WPI; 98-480805/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiéns.
Key
                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                         cancers.
                                                                                                                                                                                                                                                                                                                                                                                                    P-PSDB; W69388.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-DEC-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                      (CORI-) CORIXA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        V5864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   V58647
              181
                                      323
                                                             121
                                                                                    263
                                                                                                                                  203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              414
                                                                                                           61
                                                                                                                                           1 acaacagacccttgctcgctaacgacctcatgctcatcaagttggacgaatccgtgtccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          σ
                                                                                tgaacgtgtcggtggtgtctgaggaggtctgcagtaagctctatgacccgctgt
                                               gcctcgtttctggctggggtctgctgctggcgaacggcagaatgcctaccgtgctgcagtgcg
                                                                                                                               ACAACAGACTCTTGCTCGCTAACGACCTCATGCTCATCAAGTTGGACGAATCCGTGTCCG
                                  GCCTCGTNTCTGGCTGGGGTCTGCTGGCGAAACGGCAGAATGCCTACCGTGCTGCACTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                           1167
                                                                                                                                                                                                                                           BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers 28. .645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cdna;
                                                                                                                                                                                            97.8%;
98.3%;
                                                                                                                                                                                                                                           242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene;
                                                                                                                                                                                                                                           ?
                                                                                                                                                                               Score 228.8;
Pred. No. 1.3e
0; Mismatches
                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              clone DE13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human;
                                                                                                                                                                                                                                           400 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 prostate
                                                                                                                                                                                            .3e-59;
                                                                                                                                                                                                        멂
                                                                                                                                                                                                                                           287
                                                                                                                                                                                                       <u>بر</u>
                                                                                                                                                                                                                                           <u>ن</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cancer;
                                                                                                                                                                                Indels
                                                                                                                                                                                                      Length 1167;
                                                                                                                                                                                                                                           222
                                                                                                                                                                                                                                           1
           234
                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             467
                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                 prostate
                                                          180
                                                                                                                                262
                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                    can
                                                                                                                                                                              0
```

```
V37495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCCCSTTLERAR AND TALLER AND CCCCCS TO THE TALLER AND CCCCCS TO THE TALLER AND TH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                             W09820117-A1.
14-MAY-1998.
31-OCT-1997; U20051.
05-NOV-1996; US-744026.
(INCY-) INCYTE PHARM INC.
Bandman O, Goli SK;
WPI; 98-286933/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-FEB-1998; US-0020;
25-FEB-1997; US-8066;
01-AUG-1997; US-9046;
(CORI-) CORIXA CORP
Dillon DC, Xu J;
WPI: 98-6098651.
P-PSDB; W71782.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Polypeptides comprising immunogenic portions of prostate proteins - used in a vaccine for the treatment of prostate cancer (laim 3, Page 107; 130pp; English.

The present sequence is a new DNA which encodes an immunogenic portion of a prostate tumour protein. The encoded immunogen, or the DNA itself, can be used as a vaccine for the treatment of prostate cancer. The DNA was identified by analysis of a subtracted cDNA library obtained by subtracting a prostate tumour cDNA expression library with a normal tissue cDNA library.

Sequence 1167 BP; 242 A; 400 C; 287 G; 222 T;
Claim 5; Fig 1A-C; 68pp; English.
This DNA encodes a human prostate-specific kallikrein (HPSK). A host containing an expression vector comprising the HPSK nucleic acid seq can be used to produce the protein recombinantly. The HPSK products be used for the diagnosis of conditions or diseases associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-SEP-1998 (first entry)
Human prostate-specific kallikrein (HPSK) encoding DNA.
Prostate-specific kallikrein; HPSK; prostate carcinoma;
                                                                                                      hyperplasia
Claim 5; Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-SEP-1998
                                                                                                                                                                                                             P-PSDB; W60592.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       benign
Iomo sa
                                                                                                                                                   New isolated prostate-specific kallikrein for diagnosis and treatment of, e.g. prost
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Sinhes 230;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gn prostate
sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGAACGTGTCGGTGTCTGAGGANGTCTGCAGTAAGCTCTATGACCCGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tgaacgtgtcggtggtgtctgaggaggtctgcagtaagctctatgacccgctgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCTCGTNTCTGGCTGGGGTCTGCTGGCGAACGGCAGAATGCCTACCGTGCTGCACTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gcctcgtttctggctggggtctgctgctggcgaacggcagaatgcctaccgtgctgcagtgcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-806099.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ic kallikrein; HPSK; prostate hyperplasia; diagnosis; drug
                                                                                                                                                                                                                                                                                                                                                                                                             /transl_except= (pos:367...369,
/transl_except= (pos:412...414,
/transl_except= (pos:424...426,
/product= "HPSK protein"
/note= "xaa = unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
31. 777
/*tag=_a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97
98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . 3 %
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   228.8;
No. 1.
                                                                                                                                                     rein - used to develop prostate carcinoma or k
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .3e-59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            carcinoma;
screening;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 , aa:Xaa)
, aa:Xaa)
, aa:Xaa)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                    leic acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             262
```

```
멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
PT New nucleic acids encoding human secreted proteins - obtained from PT CDNA libraries prepared from e.g. liver, ovary, brain, prostate, PT kidney, lung, umbilical cord, placenta and colon tissue PS Claim 1; Page 205; 824pp; English.

CC X41094 to X41347 represent 5' expressed sequence tags (ESTs) for human CC secreted proteins, and encode the proteins given in Y12261 to Y12514, CC respectively. The proteins given represent the signal peptide and an CC N-terminal fragment of a secreted protein. The nucleic acid sequences CC can be used for producing secreted human gene products. They can also be used to develop products for diagnosis and therapy. The proteins CC activity, haematopoiesis regulating activity, chall proliferation/differentiation CC activity, reproductive hormone regulating activity, chemotactic/ CC ligand activity, anti-inflammatory activity, tumour inhibition activity or other activity, anti-inflammatory activity, tumour inhibition activity and cormonome mapping procedures. The sequences can also be used for obtaining corresponding procedures. The sequences can also be used for the signal peptide can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a membrane, or importing a polypeptide into a cell.

Sequence 402 BP; 80 A; 125 C; 121 G; 75 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUN-1999 (first entry)
Human secreted protein 5' EST SEQ ID NO:58.
Human; secreted protein; EST; expressed sequence tag; diagnosis; forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematopoiesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostatic; thrombolytic; anti-inflammatory; tumour inhibition; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              expression of HPSK such as prostate carcinoma and benign prostate hyperplasia. Agonists and antagonists which specifically bind to HI modulate its activity can be used for the preparation of treatment such conditions or diseases. The products can also be used for determine drug screening, especially for the detection of prostate-specifically for the detection of pros
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-JUL-1998; IB1222.
01-AUG-1997; US-905135.
02 CENT ) GENSET.
DUCLERT A, Dumas Milne Edwards J, Lacrolx
WPI; 99-153778/13.
P-PSDB; Y12281.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        X41114 standard; cDNA;
X41114;
17-JUN-1999 (first en
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens. W09906548-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         l acaacagaccottgotogotaacgacotoatgotoatcaagttggacgaatcogtgtocg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         229; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 227.8;
Pred. No. 2.4e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .4e-59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HPSK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

```
RESULT
V61250
ID V6
AC V6
                                                                                                                                                                                                                           CCCCCCTTRAPPRACTONS
                                                             δÃ
                                                                                밁
                                                                                             δÃ
                                                                                                                 Db
                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                 D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                 Query Match
Best Local S
Matches 154
                                                                                                                                                                                                                                                                                                                        WO9837418-A2.
27-AUG-1998.
25-FEB-1998; UO3690.
09-FEB-1998; US-904809.
25-FEB-1997; US-806596.
01-AUG-1997; US-904809.
                                                                                                                                                                                               Novel human prostate specific tumour protein and fragments - useful for detecting and treating prostate cancers Claim 1; Page 113-114; 141pp; English.

This sequence represents a human prostate tumour specific gene, and car be used in the method of the invention. The method is for detecting prostate cancer comprises contacting a biological sample with an agent able to bind an immunogenic portion of a prostate protein (such as encoded by this sequence). An antibody which binds to an immunogenic portion of the prostate protein, and the method can be used to detect, monitor progression of, or treat prostate cancers. The antibody may also be conjugated to a therapeutic agent for use in therapy of prostate cancers.
 V61250;
                                                                                                                                                                                                                                                                                                Dillon DC, Xu J;
WPI; 98-480805/41.
                                                                                                                                                                                                                                                                                                         (CORI-) CORIXA
Dillon DC, Xu J
                                                                                                                                                                                                                                                                                                                                                                                  therapy;
                                                                                                                                                                                                                                                                                                                                                                                            Prostate tumour
                                                                                                                                                                                                                                                                                                                                                                                                   Prostate
                                                                                                                                                                                                                                                                                                                                                                                                            08-DEC-1998
                                                                                                                 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    362
                                                 335
                                                                                 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    242
                                                                                                                                                  Local Sin
                                                                                                19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                              11
                                               gcctcgtttctggctggggtctgctggcgaacgg
                                                                              standard;
                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                65.8%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                       specific gene clone DE2.
specific gene; human; prostate cancer; detection;
                                                                                                                                                                                          ВP;
        cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          66.2%;
100.0%;
        1265
                                                                                                                                                                                                                                                                                                                                                                                                                           1265
                                                                                                                                                                                          256
                                                                                                                                                                                         ð
       ВP
                                                                                                                                                 ç,
                                                                                                                                                                                                                                                                                                                                                                                                                           ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                        Score 154;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 155;
Pred. No.
                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                         432
                                                                                                                                                                                         Ç
                                                                                                                                               3.1e-37;
hes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.2e-37;
thes 0;
                                                368
                                                             154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BB
                                                                                                                                                                DB
                                                                                                                                                                                         321
                                                                                                                                                                                         <u>و</u>
                                                                                                                                                                Length 1265;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                         245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   402;
                                                                                                                                                0
                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                        prostate
                                                                                              120
                                                                                                              274
                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                can
                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                        Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                       밁
```

```
RESULT
V58646
   Query Match
Best Local S
Matches 154
                                                                                                                                                                                                                                                      Homo sapiens.

WO9837418-A2.
27-AUG-1998.
25-FEB-1998; U03690.
09-FEB-1998; US-904809.
25-FEB-1997; US-906596.
01-AUG-1997; US-904809.
(CORI-) CORIXA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-AUG-1998.
25-FEB-1998; U3-020956.
09-FEB-1997; US-806099.
25-FEB-1997; US-904804.
                 also be
                                             Novel human prostate specific tumour protein and fragments - useful for detecting and treating prostate cancers Claim 1; Page 114; 141pp; English.

This sequence represents a human prostate tumour specific gene, and can be used in the method of the invention. The method is for detecting prostate cancer comprises contacting a biological sample with an agent able to bind an immunogenic portion of prostate protein (such as encoded by this sequence). An antibody which binds to an immunogenic portion of the prostate protein, and the method can be used to detect, monitor progression of, or treat prostate cancers. The antibody may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Polypeptides comprising immunogenic portions of prostate protein used in a vaccine for the treatment of prostate cancer claim 3; page 105-106; 130pp; English.

The present sequence is a new DNA which encodes an immunogenic p of a prostate tumour protein. The encoded immunogen, or the DNA can be used as a vaccine for the treatment of prostate cancer. I am a vaccine for the treatment of prostate cancer. I was identified by analysis of a subtracted cDNA library with a nor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        subtracting a prostate tumour cDNA expression library with a tissue cDNA library.
Sequence 1265 BP; 256 A; 432 C; 321 G; 245 T;
                                                                                                                                                                                                                        WPI; 98-480805/41.
                                                                                                                                                                                                                                        Dillon DC,
                                                                                                                                                                                                                                                                                                                                                                                                  08-DEC-1998 (first entry)
Prostate tumour specific gene clone DE6.
Prostate tumour specific gene; human; prostate cancer; detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                V58646;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
WO9837093-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 V58646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dillon DC, Xu J;
WPI; 98-609886/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-JAN-1999 (
CDNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Prostate; cancer; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CORI-) CORIXA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    215 ACAACAGACCCTTGCTCGCTAACGACCTCATGCTCATCAAGTTGGACGAATCCGTGTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     / Match 65.8%;
Local Similarity 100.0%
les 154; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 acaacagacccttgctcgctaacgacctcatgctcatcaagttggacgaatccgtgtccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gcctcgtttctggctggggtctgctggcgaacgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 agtctgacaccatccggagcatcagcattgcttcgcagtgccctaccgcgggggaactctt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTCTGACACCATCCGGAGCATCAGCATTGCTTCGCAGTGCCCTACCGCGGGGAACTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
                                 conjugated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
ce of prostate tumour clone P703 splice variant ancer: tumour; vaccine; immunogen; clone; ss.
   BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA;
                                   ៥
                                   ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1459
   427
                                 therapeutic agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .0%;
 ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ΒP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 154;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          portions of prostate proteins of prostate cancer
Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.1e-37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
                                 for use
ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1265
                                 'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                               therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           obtained
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                 of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A itself,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The ed by
                                 prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

```
RESULT V58648
ID V5
AC V5
DT 08
DE Pr
KW Pr
                                                                                                             Qy
                                                                                                                                     멍
                                                                                                                                                        Ş
                                                                                                                                                                            В
                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 154
                                                                                                                                                                                                                  Matches
Prostate tumour :
Prostate tumour :
therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                               27-AUG-1998: UO:
25-FEB-1998: UO:
09-FEB-1997: US:
25-FEB-1997: US:
01-AUG-1997: US:
(CORI-) CORIXA
                                                                                                                                                                                                                                                                                Polypeptides comprising immunogenic portions of prostate proteins - used in a vaccine for the treatment of prostate cancer Claim 3; Page 106; 130pp; English.

The present sequence is a new DNA which encodes an immunogenic portion of a prostate tumour protein. The encoded immunogen, or the DNA itself, can be used as a vaccine for the treatment of prostate cancer. The DNA was identified by analysis of a subtracted CDNA library with a normal subtracting a prostate tumour cDNA expression library with a normal
                                                                                                                                                                                                                                                                subtracting a prostate tissue cDNA library. Sequence 1459 BP;
                                       V58648 standard;
V58648;
                                                                                                                                                                                                                                                                                                                                                                        Dillon
                                                                                                                                                                                                                                                                                                                                                                                                                                                            cDNA sequence of prostate tumour clone P703 splice variant Prostate; cancer; tumour; vaccine; immunogen; clone; ss.
                              08-DEC-1998
                                                                                                                                                                                                                                                                                                                                                              WPI; 98-609886/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-JAN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               136
                                                                                                                                       196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                    121
                                                                                                                                                                             136
                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                Match 65.8%;
Local Similarity 100.0%;
les 154; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gcctcgtttctggctggggtctgctgctggcgaacgg
                                                                                                                                     sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTCTGACACCATCCGGAGCATCAGCATTGCTTCGCAGTGCCCTACCGCGGGGAACTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                agtotgacaccatcoggagcatcagcattgcttcgcagtgccctaccgcggggaactctt 120
                                                                                                          DC, Xu J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                          US-020956.
US-806099.
US-904804.
        (first entry)
mour specific ge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                 CORP.
                                                 CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65.8%;
                                                                                                                                                                                                                                                                  427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1459
         gene clone
gene; humar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .08;
                                                                                                                                                                                                                                                                 Α.
                                                 ВP
                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВP
                                                                                                                                                                                                                         Score 154;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 154;
Pred No.
          human;
                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                 328
                    DE14
                                                                                                                                                                                                                                                                 ç
          prostate
                                                                                                                                                                                                                          DB 1;
3.2e-37;
                                                                                                                   154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.2e-37;
                                                                                                289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                                                                                 406
                                                                                                                                                                                                                                                                 <u>ი</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1459;
                                                                                                                                                                                                                                    Length 1459;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                  295
                                                                                                                                                                                                                                                                 H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                               portion
A itself,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              195
                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 161
                                                                                                                  25-FEB-1998; U03492.

09-FEB-1998; US-020956.

25-FEB-1997; US-806099.

01-AUG-1997; US-904804.

(CORI-) CORTIXA CORP.

D1110RI-) CORTIXA CORP.

D1110RI-) 98-609886/51.

P-PSDB; W71873/
                                                                                                                                                                                                                              Homo sapiens.
W09837093-A2.
27-AUG-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9837418-A2.
27-AUG-1998.
25-FEB-1998; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  also be cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel human prostate specific tumour protein and fragments - useful for detecting and treating prostate cancers Claim ! Page 116-117; 141pp; English.

This sequence represents a human prostate tumour specific gene, and can be used in the method of the invention. The method is for detecting prostate cancer comprises contacting a biological sample with an agent able to bind an immunogenic portion of a prostate protein (such as encoded by this sequence). An antibody which binds to an immunogenic portion of the prostate protein, and the method can be used to detect, monitor progression of, or treat prostate cancers. The antibody may also be conjugated to a therapeutic agent for use in therapy of prostate cancers.
                      Polypeptides comprising immunogenic portions of prostate protein used in a vaccine for the treatment of prostate cancer Claim 3; Page 108-109; 130pp; English.
The present sequence is a new DNA which encodes an immunogenic p of a prostate tumour protein. The encoded immunogen, or the DNA can be used as a vaccine for the treatment of prostate cancer. The was identified by analysis of a subtracted cDNA library obtained
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-FEB-1998; U03690.
09-FEB-1998; US-904809.
25-FEB-1997; US-806596.
01-AUG-1997; US-904809.
                                                                                                                                                                                                                                                                     Prostate; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dillon DC, Xu J;
WPI; 98-480805/41.
P-PSDB; W69389.
subtracting a prostate tumour tissue cDNA library.
                                                                                                                                                                                                                                                                                                                                                                                          329
                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                              269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gcctcgtttctggctggggtctgctggcgaacggcagaatgcctaccgtgctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                            agtctgacaccatccggagcatcagcattgcttcgcagtgccctaccgcgggggaactctt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAACAGACCCTTGCTCGCTAACGACCTCATGCTCATCAAGTTGGACGAATCCGTGTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens.
                                                                                                                                                                                                                                                                                                                                                                                         GCCTCGTTTCTGGCTGGGGTCTGCTGGCGAACGATGCTGTGATTGCCATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTCTGACACCATCCGGAGCATCAGCATTGCTTCGCAGTGCCCTACCGCGGGGAACTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161;
                                                                                                                                                                                                                                                                                                                        standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORIXA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1119
                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORP
                                                                                                                                                                                                                                                                     prostate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers 34. .528
                                                                                                                                                                                                                                                                                                                        CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  65.78;
93.18;
                                                                                                                                                                                                                                                                                                                        1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       248
                                                                                                                                                                                                                                                                      vaccine;
                                                                                                                                                                                                                                                                   tumour clone P703 splice variant DE14 vaccine; immunogen; clone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ?
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 153.8;
Pred. No. 3.4e
0; Mismatches
                                                                                                                                                                                                                                                                                                                        ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8; DB 1;
3.4e-37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ဂ္
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        284
                         obtained
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        H
                                                                                                     proteins
                                                                                                                                                                                                                                                                                                                                                                                          381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                              328
                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
```

```
δ
               Š
                             B
                                                         В
                                                                   οy
                                                                                                                       SO
                                                                                  Query Match 65.7%; Score 153.8; DB 1; Length 1119; Best Local Similarity 93.1%; Pred. No. 3.4e-37; Matches 161; Conservative 0; Mismatches 12; Indels 0;
                                                                                                                      Sequence
1119 BP;
                                                                                                                     248 A;
                                                                                                                      305 C;
                                                                                                                      282 G;
                                                                                                                      284 T;
                                                                                  Gaps
                                                                                   0
```

Search completed: June 19, 2000, 18:55:38 Job time: 4033 sec

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                            Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match
Listing first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Title:
Perfect score:
                                                                                                       O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Otal number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rched:
 9
                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                            2348.
67.88.
655.66.68.
622.42.
                                                                                                                                                                                                                                                                                                                                       Score
                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         length: 0
length: 1000000
                                                                                                                                                                                                                                                                                                                                       Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                          N_Geneseq_36:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          June 19, 2000, 18:55:47; Search time 94.16 Seconds (without alignments) 4307.151 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                    00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-232-880-107
1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        311585 seqs, 125096042 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GenCore version 4.5
Copyright (c) 1993 - 2000 Comp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      816
816
                                                                                                                                                                                                                                                                                                                                                                                                                                             408
                                                                                                                                                                       Q44447
Q44448
T59701
V09116
V61487
Q58669
                                                                                                                                                                                                                                                                              V61189
V58481
                                       X04382
                                                                                     V81394
X04311
                                                                                                                                    V54587
T90174
                                                                                                                                                                                                                                                                                                                                       IJ
                                                                                                                                                                                                                                          V58480
                                                                                                                                                                                                                                                    V61276
                                                                                                                                                                                                                                                                                                                    V5858
                                                                                                                                                                                                                                V61140
                                                                                                                                                                                                                                                                     V61141
                                                                                                                          V44867
                                                                                                                                                                                                                                                                                                                                                                                                                                               summaries
                                                                                                                                                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      623170
                                                                                                                                                                                                                                                                                                                                       Description
                                                                                                                                                                                                 3' cDNA sequence o
3' cDNA sequence o
3' cDNA sequence o
Cephalosporin C cD
Cephalosporin C ge
PTH-like peptide D
                                                                                                     Human secretory pr
Oil seed rape cyst
Clone CT797_3 codi
Melon aconitase cD
Hepatitis C virus
                  Norwalk virus stra
                                    S. tuberosum isoam
Human secreted pro
Human interleukin-
Human survival mot
                                                                                                                                                   Protein allergen o
Human interleukin-
Human secreted pro
                                                                Tomato acid invert
                                                                                    Human tumour antig
                                                                                                                                                                                3' nucleotide sequ
Human secreted pro
                                                                                                                                                                                                                                                                                       CDNA sequence of p
                                                                                                                                                                                                                                                                                                                    Prostate tumour
                                                                                                                                                                                                                                                                                                         Full length
                                                                                                                                                                                                                                                  fragment of pro
cDNA sequence o
fragment of pro
cDNA sequence o
                                                      tuberosum
                                                                                                                                                                                                                                                                                                         mour sp
```

밁 δÃ 밁 δÃ 밁 Qy 밁 Q

181

GCCGCGGGAGCCGCCGTGCTGCGGCGTCTGTGCAAGCGGTCGGATGTGCTGCTGGAGCC gccgcggggagccgcgtgctgcgggcgtctgtgcaagcggtcggatgtgctgctggagcc

240 240

181

121 121

	WCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	
Query Ma Best Loc Matches	850	5 5 5 5 5 5 7 M 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
tc)	Scalandor Processor Control Co	44444 335 4444 5444 544
y Match Local Similarity hes 1621; Conser	V58584 standard; cDN V58584; prostate tumour spec prostate tumour spec therapy; ss. Homo sapiens. Loca CDS Z7-ANG-1998; U03690. 25-FEB-1998; U03690. 09-FEB-1998; US-9048 CORI- CORIXA CORP. Dillon DC, Xu J; WPI; 98-480805/41. P-PSDB; W6383. Novel human prostate for detecting and trac Claim 1; Page 81-82; This sequence repres be used in the metho prostate cancer comp able to bind an immu encoded by this sequencers. Sequences 1621 BP;	
ia t	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ហេហហហហហហហ
Match ocal s 162	1 1 584 stand 584 stand 584; state tum state tum state tum state tum state 1998; ss. to sapiens FEB-1998; FEB-1997;	ပေပေလထထထထထ
1.5	1998 e tuu 1998 e tuu 1998 e tuu 1998 e tuu 1998 e Ca i in of e ca of proof con con con con con e ca e c	@@@@@@@@
ૄ≅	184 standard; cDN 34; c198 (first Loca 252; ss. 252] ss. 252] ss. 252] ss. 252] ss. 252] ss. 252] ss. 253] ss.	
larity Conservat	idard; cDNA; ]  (first ent)  mour specific  is.  Location  5. 115:  /*tag=  103690.  105-904809.	
150	1	00000000111
Ä	rd; cDNA; (first en ur specif ur specif 5. 11 /*tag= 1/*tag= 1/**tag= 1/*tag= 1/**tag= 1/**ta	
gi ct	pecification of the control of the c	1582 2001 2427 2233 2237 6644 7372 7797 7799 1536 2271
100 100 :ive	entr. entr. iffic offic 399. 399. 396. 399. 399. 399. 399. 399.	712 712 712 712 712
	cDNA; 1621 irst entry) specific ge specific ge specific ge Location/Ou 5. 1153 /*tag= a 369090,480990,480990,480980659690,480980759690,480960RP. ; 41. state specific ge state specific ge complete ge state specific ge state specific ge comprises of the comprises of the sequence). prostate pro sion of, or ted to a the BP; 461	
9 9		444444444
0	ALIGNMEN  21 BP.  21 BP.  22 Bene clone F1-  3ene; human; H  3ene; human prostation  3ene; English  4ene invention  5english  4ene invention  6ene invention  6ene invention  7ene invention  7ene invention  8ene invention  8ene invention  9ene invention  9ene invention  1ene invention	T28259 T59700 Q04107 V10120 Q20360 X33181 X33180 X33180 X33184 Q941111 V84632
Score Pred. Misn	ALIGNMENT  e clone F1-1 e; human; p1 e; human; p1 c tumour propostate cann english. invention of a ntacting a portion of a ntacting a and the reat prostat portion of a nantibody in antibody in antibody in and the grapeutic agen in	34 34 34 34 34 34 34 34
<b>3</b> 0 0	it is a tributed by the state of the state o	32 32 32 32 32 32
ST 6	ALIGNI clone   human fiers fiers fiers fiers fiers an propertion of the propertion of the properties o	
162 No. natc		
	lone F1-12 human; pro; iers iers iers tate cance: lish. n prostate vention. Incting of a bi tion of a bi tion of a bi prostate t prostate t prostate t prostate t prostate t prostate	
sat (0; (1)	MENTS FI-12. protein cancers cancers cancer fa biolo of a pro of a pro dy which dy which state ca state ca state fo	
DB	ALIGNMENTS  BP.  BP.  clone F1-12.  ne; human; prostate cancer; detection;  alifiers  lic tumour protein and fragments - useful prostate cancers  English.  English.  buman prostate tumour specific gene, and contacting a biological sample with an agen contacting a biological sample with an agen portion of a prostate protein (such as an antibody which binds to an immunogenic treat prostate cancers. The antibody may rapeutic agent for use in therapy of prost A;  330 C;  412 G;  418 T;	
	ate ate n ar n a	
1; 0;	users; call	
нн	cancer;  cancer;  d fragm  d fragm  ir speci	
Lengt Indel	cer; ragme ragme ragme ragme ragme ragme fo a to a t	
Length Indels	4 the a u	навсявняя
	cer; detection; ragments - usef ragments - usef pecific gene, a is for detect sample with an protein (such a to an immunoge to an immunoge The antibody n in therapy of p	Survival PTH-like Human pro Human ret Human reo Base sequ Base sequ Base sequ Base sequ MML genom
16	T attended to the	an a
0;	y o ct	since view reputation
	cection;  - useful gene, and detecting yith an ag (such as munogeni detection to dete	like peptin pro-urok n pro-urok n pro-urok n pro-urok n pro-urok sequence ox virus b sequence ogenomic DN n secreted
ဂ္ဂ	and and and and province of the province of th	motor pepti -urok inoid -urok ence e ence e ence o ence o ence o
Gaps		tor rokir rokir oid z rokin ce of ce of ce of DNA.
-	ncer; detection;  fragments - useful  pecific gene, and can  generate with an agent  protein (such as  to an immunogenic  an be used to detect,  The antibody may  in therapy of prostat  418 T;	3000000
	ful ful and can ing agent as etect, ethic prostate	neu le D le D le D rec nas nas f t f t f t f t pro
0,		_

```
ð. B
                                                    В
                                                                                   В
                                                                                                                       밁
                                                                                                                                   Ş
                                                                                                                                                       Вþ
                                                                                                                                                                      δÃ
                                                                                                                                                                                       망
                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                망
1321
                                                                                                                                                                                           961
                                                                                                                                                                                                          961
                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                721
                tagagtaacacataacattgtatgcatggaaacatggaggaacagtattacagtgtgtccta
                                                                                             agctagtctctaacttccaggcccacggctcaagtgaatttgaatactgcatttacagtg
                                                                                                                    TTTCAAAAGGGATCCTTTCATAGGAGAACACACTGAGGAGATACTTGAAGAATTTGGATT
                                                                                                                                                               tttcaaaagggatcctttcataggagaacacactgaggagatacttgaagaatttggatt
                                                                                                                                                                                        ggagcaggacgtgagcccccgccctgcacctctgctgttaaacaccccagccatcccttc
                                                                                                                                                                                                                         ttttgaggaggttgttcatcatgatcacaaccaaggaacggggctcgtttatcaccagtga
                                                                                                                                                                                                                                                           gaaggcagagtggtgtcaaatctttgacggcacagatgcctgtgtgactccggttctgac
                                                                                                                                                                                                                                                                                            CTATACGACTTACAGGACAGCAGATGGGGAATTCATGGCTGTTGGAGCAATAGAACCCCA
                                                                                                                                                                                                                                                                                                                                                                                                CATTGATGCAAATATGGTGGAAGGAACAGCATATTTAAGTTCTTTTCTGTGGAAAACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gtgtgcactgggcattataatggctctttttgaccgcacacgcactgacaagggtcaggt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       agctggccacgatatcaactatttggctttgtcaggtgttctctcaaaaatttggcagaag
aatggttatcattagggcttttgatttataaaactttgggtacttatactaaattatggt
                                                                                                                                                                                                                                                                                                                                        gttctacgagctgctgatcaaaggacttggactaaagtctgatgaacttccccaatcagat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tccaaggcttatttatgccaggctgagtgggtttggccagtcaggaagcttctgccggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cttccgccgcggtgtcatggagaaactccagctgggcccagagattctgcagcgggaaaa
                                                   TAGAGTAACACATAACATTGTATGCATGGAAACATGGAGGAACAGTATTACAGTGTCCTA
                                                                                                                                                                                                                                                                                                                                GTTCTACGAGCTGCTGATCAAAGGACTTGGACTAAAGTCTGATGAACTTCCCAATCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTCCGCCGCGGTGTCATGGAGAAACTCCAGCTGGGCCCAGAGATTCTGCAGCGGGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCAAGGCTTATTTATGCCAGGCTGAGTGGATTTGGCCAGTCAGGAAGCTTCTGCCGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                  1260
                                                                                                                     1140
                                                                                                                                      1140
                                                                                                                                                       1080
                                                                                                                                                                        1080
                                                                                                                                                                                         1020
                                                                                                                                                                                                         1020
                                                                                                                                                                                                                                         960
                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                           960
                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
```

Š

γQ

δÕ

```
RESULT V61199
ID U61199
ID U61199
DE PO DE
밁
                                        δÃ
                                                                                        B
                                                                                                                              Ş
                                                                                                                                                                                         밁
                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Sim
Matches 1621;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-JAN-1999 (first entry)
Full length cDNA sequence of prostate; cancer; tumour; v. Homo sapiens.
W09837093-A2.
27-AUG-1998; U03492.
09-FEB-1998; US-908099.
01-AUG-1997; US-908099.
01-AUG-1997; US-904804.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Polypeptides comprising immunogenic portions of prostate proteins - used in a vaccine for the treatment of prostate cancer Claim 3; Page 76-77; 130pp; English.

The present sequence is a new DNA which encodes an immunogenic portion a prostate tumour protein. The encoded immunogen, or the DNA itse can be used as a vaccine for the treatment of prostate cancer. The can be used as a vaccine for the treatment of prostate cancer. The can be used as a vaccine for the treatment of prostate cancer. The can be used as a vaccine for the treatment of prostate cancer. The can be used as a vaccine for the treatment of prostate cancer. The can be used as a vaccine for the treatment of prostate cancer. The can be used as a vaccine for the treatment of prostate cancer. The can be used as a vaccine for the treatment of prostate cancer. The can be used as a vaccine for the treatment of prostate cancer. The can be used as a vaccine for the treatment of prostate cancer. The can be used as a vaccine for the treatment of prostate cancer. The can be used as a vaccine for the encoded immunogen, or the DNA itsection by an immunogenic portion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dillon DC, Xu J;
WPI; 98-609886/51.
P-PSDB; W71867.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   V61199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (CORI-) CORIXA
                                        181
                                                                                             121
  181
                                                                                                                                           121
                                                                                                                                                                                              61
                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                         \vdash
                                                                                                                                                                                                                                                                                                                                            μ.
                                                                                                                                                                                                                                                                                                              cyccatgycactycagygcatctccyytcatyyayctytccyycctyyccccyyyccccytt
                                                                                                                                                                                                                                                                                    CGCCATGGCACTGCAGGGCATCTCGGTCATGGAGCTGTCCGGGCCTGGCCCCGGGCCCGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atttacactcttgattctacaatgtagaaaatgaggaaatgccacaaattgtatggtgat
                 CTGTGCTATGGTCCTGGCTGACTTCGGGGCGCGCGTGGTACGCGTGGACCGGCCCGGCTC
                                                                                                                                                                                                                  ctgtgctatggtcctggctgacttcggggcgcgtgtggtacgcgtggaccggcccggctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                       100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of prostate tumour clone vaccine; immunogen; clone
                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ₽P
                                                                                                                                                                                                                                                                                                                                                                                     Score 1621;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                        1621;
                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 portion '+self,
                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                        240
                                                                                      180
                                                                                                                                         180
                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
, Qy
                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
 망
             Q
                                B
                                            Qy
                                                                 밁
                                                                              Ş
                                                                                                  В
                                                                                                               οy
                                                                                                                                    밁
                                                                                                                                               δõ
                                                                                                                                                                     망
                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                       рь
                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                   1081
                                                                                                                                                    1021
                                                                                                                                                                     961
                                                                                                                                                                                                     901
                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                     Ctatacgacttacaggacagcagatggggaattcatggctgttggagcaatagaacccca
                                                                                                                                                                                                                                                                                                                                                                      cattgatgcaaatatggtggaaggaacagcatatttaagttcttttctgtgggaaaactca
                                                                                                                                                                                                                                                                                                                                                                                                                                         agctagtctctaacttccaggcccacggctcaagtgaatttgaatactgcatttacagtg
                                                                                                 ggagcaggacgtgagcccccgccctgcacctctgctgttaaacaccccagccatcccttc
                                                                                                                                                                                                            tttgaggaggttgttcatcatgatcacaacaaggaacggggctcgtttatcaccagtga
                                                                                                                                                                                                                                             gaaggcagagtggtgtcaaatctttgacggcacagatgcctgtgtgactccggttctgac
                                                                                                                                                                                                                                                                               gagcatggatgattggccagaaatgaagaagtatgcagatgtatttgcaaagaagac
                                                                                                                                                                                                                                                                                                      CCACTCTAATCAAGAAAAGAATTACAGACTCTGATTCTACAGTGATGATTGAATTCTAAA
                                                                                                                                                                                                    TTTTGAGGAGGTTGTTCATCATGATCACAACAAGGAACGGGGCTCGTTTATCACCAGTGA
                                                                                                                                                                                                                                      GAAGGCAGAGTGGTGTCAAATCTTTGACGGCACAGATGCCTGTGTGACTCCGGTTCTGAC
                                                                                                                                                                                                                                                                       GAGCATGGATGATTGGCCAGAATGAAGAAGAAGTTTGCAGATGTATTTGCAAAGAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tccaaggcttatttatgccaggctgagtggattttggccagtcaggaagcttctgccggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cttccgccgcggtgtcatggagaaactccagctgggcccagagattctgcagcgggaaaa
                                tagagtaacacataacattgtatgcatggaaacatggaggaacagtattacagtgtccta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCTGGCCACGATATCAACTATTTGGCTTTGTCAGGTGTTCTCTCAAAAATTGGCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAAGGCTTATTTATGCCAGGCTGAGTGGATTTGGCCAGTCAGGAAGCTTCTGCCGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTCCGCCGCGGTGTCATGGAGAAACTCCAGCTGGGCCCAGAGATTCTGCAGCGGGAAAA
                                                                                                               1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                  1140
                                                                                                                                                  1080
                                                                                                                                                                    1020
                                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                1260
                                                                                 1200
                                                                                                                                                                                    1020
                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
```

04 pp 04

121

1156

51

```
V5825LT V5825L
    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ď,
                                        Š
                                                                                       Query Match
Best Local Similarity
Matches 529; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-FEB-1998; U03690.
09-FEB-1998; US-904809.
25-FEB-1997; US-806596.
01-AUG-1997; US-904809.
(CORI-) CORIXA CORP.
Dillon DC, Xu J;
                                                                                                                                                                                                      able to I encoded I portion of monitor palso be cancers.
                                                                                                                                                                                                                                           pillon DC, Xu J;

WPI; 98-480805/41.

Novel human prostate specific tumour protein and fragments - useful for detecting and treating prostate cancers

Claim 1; Page 67; 141pp; English.

This sequence represents a human prostate tumour specific gene, and can be used in the method of the invention. The method is for detecting prostate cancer comprises contacting a biological sample with an agent able to bind an immunogenic portion of a prostate protein (such as encoded by this sequence). An antibody which binds to an immunogenic portion of the prostate protein, and the method can be used to detect, monitor progression of, or treat prostate cancers. The antibody may also be conjugated to a therapeutic agent for use in therapy of prostate prostate.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
WO9837418-A2.
27-AUG-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1321
                                            1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     V58551
  ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atttacactcttgattctacaatgtagaaaatgaggaaatgccacaaattgtatggtgat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      998 (first entry)
tumour specific g
tumour specific g
                                                                                                                                                                                                          537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                            Conservative
                                                                                                                                                                                                          B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cDNA;
                                                                                                                 31.
98.
                                                                                                                                                                                                          185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       537
                                                                                                              5.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene (
                                                                                                                                                                                                        Α,
                                                                                         0
                                                                                       Score 515; DB 1; I
Pred. No. 8.3e-98;
D; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         clone R1-2330.
; human; prostate
                                                                                                                                                                                                          80
                                                                                                                                                                                                        Ç
                                                                                                                                                                                                          86
                                                                                                                                                                                                        <u>ن</u>
                                                                                                                                 Length
                                                                                                                                                                                                          172
                                                                                         Indels
                                                                                                                                                                                                          H
                                                                                         ۲.
                                                                                         Gaps
                                                                                                                                                                                                                                                     prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1500
  60
                                                                                         1;
```

```
Ş
                                                     Š
                                                                                              δ
                                   밁
                                                                             망
                                                                                                                       В
                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
V61189
                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                               Matches
                                                                                                                                                                         Query Match
Best Local s
                                                                                                                                                                                                                                                                                                                                Homo sapiens.

WO9837093-A2.

27-AUG-1998.
25-FEB-1998; U03492.
09-FEB-1998; US-020956.
25-FEB-1997; US-806099.
01-AUG-1997; US-904804.
(CORI-) CORIXA CORP.
Dillon DC, Xu J;
                                                                                                                                                                                                               Polypeptides comprising immunogenic portions of prostate proteins used in a vaccine for the treatment of prostate cancer Claim 3; Page 64; 130pp; English.

The present sequence is a new DNA which encodes an immunogenic po of a prostate tumour protein. The encoded immunogen, or the DNA i can be used as a vaccine for the treatment of prostate cancer. The was identified by analysis of a subtracted cDNA library obtained subtracting a prostate tumour cDNA expression library with a norm tissue cDNA library.

Sequence 537 BP; 185 A; 80 C; 98 G; 172 T;
                                                                                                  1096
                                                                                                                 1036 tttcataggagaacacactgaggagatacttgaagaattttggattcagccgcgaagagat 1095
              1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1456
                                                                                                                                                                                                                                                                                                                                                                                                                               Prostate; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JAN-1999 (first cDNA sequence of pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       V61189 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                             61
                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tun 20 08:41:30 2000
                                                                                                                                                                                                                                                                                                                       98-609886/51.
cattgtatgcatggaaacatggaggaacagtattacagtgtcctaccactctaatcaaga
                                                                        TTATCAGCTTAACTCAGATAAAATCATTGAAAGTAATAAGGTAAAAGCTAGTCTCTAACT
                                                                                   ttatcagcttaactcagataaaatcattgaaagtaataaggtaaaagctagtctctaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tccaggcccacggctcaagtgaatttgaatactgcatttacagtgtagagtaacacataa 1215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTACAATGTAGAAAATGAAGGAAATGCCCCAAATTGTATGGTGATAAAAGTCCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tctacaatgtagaaaatg-aggaaatgccacaaattgtatggtgataaaagtcacgt 1571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTGAAAAANGAATGATATTCTTGAAGACATCGATATACATTTATTTACACTCTTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGTTTGCTTGATATTTGTTGATATTAAGATTCTTGACTTATATTTTGAATGGGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       529;
                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                         prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
                                                                                                                                                                      31.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                               tumour clone
vaccine; immu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВP
                                                                                                                                                            Score 515; DB Pred. No. 8.3e 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                              1mmunogen;
                                                                                                                                                                                                                                                                                                                                                                                                                  e R1-2330.
                                                                                                                                                                      3e-98;
                                                                                                                                                                                 DB 1;
                                                                                                                                                                                Length
                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                    en entropies
                                                                                                                                                            ļ.
                                                                                                                                                                                                                                                                   portion
iA itself,
                                                                                                                                                                                                                                             The I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           537
                                                                                                                                                            Gaps
            1275
                                                                                              1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1335
                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                         DNA
```

밁 õ

Š

795 295

ggccagaaatgaagaagtttgcagatgtatttgcaaagaagaagacgaaggcagagtggt

854 236

tgatcaaaggacttggactaaagtctgatgaacttcccaatcagatgagcatgatt GGACAGCAGATGGGGAATTCATGGCTGTTGGAGCAATAGAACCCCAGTTCTACGAGCTGC

794 296

TGATCAAAGGANNTGGACTAAAGTCTGATGAACTTCCCAATCAGATGAGCATGGATGATT

Ş

ggacagcagatggggaattcatggctgttggagcaatagaaccccagttctacgagctgc

gggaagcacctcgaggacagaacatgttggatggtggagcacctttctatacgacttaca

GGGCCCCCCCCCGAGGACAGAACATGTTGGATGGTGGAGCACCTTTCTATACGACTTACA

356

674

밁

415 615

밁

```
밁
                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                    밁
 Matches 409;
      Query Match
Best Local Similarity
                                                                                                                                                                                                                     1516
                                                                                                                                                                                                                                          1456
                                                                                                                                                                                                                                                               1396
                                                                                                                                                                                                                                                                                    1336
                                                                                                                                                     therapy; ss.
                                                                                                                                                               5' fragment of
                                                                                                                                                                     V58481;
08-DEC-1998
                                                                                                                                                                               V58481 standard;
                                                                                                                                                                                                                                                                                                         1276
                                                                                                                                                          Prostate tumour
                                                                                                                                                                                                                                421
                                                                                                                                                                                    6
                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                           481
                                                                                                                                                                                                         ggcttttgatttataaaactttgggtacttatactaaattatggtagttattctgccttc 1395
                                                                                                                                                                                                                                                                                                    aaagaattacagactctgattctacagtgatgattgaattctaaaaatggttatcattag
                                                                                                                                                                                                                                                                        GCCTTTTGATTTATAANACTTTGGGTACTTATACTAAATTATGGTAGTTATACTGCCTTC
                                                                                                                                                                                                                                                                                             AAAGAATTACAGACTCTGATTCTACAGTGATGATTGAATTCTAAAAATGGTAATCATTAG
                                                                                                                                                                                                                                                                                                                   CATTGTATGCATGGAACATGGAGGAACAGTATTACAGTGTCCTACCACTCTAATCAAGA
                            773
 Conservative
                                                                                                                                                          f prostate t
                                                                                                                                                                     (first entry)
                           BP;
                                                                                                                                                                               CDNA;
      25.1%;
                           154
                                                                                                                                                         c gene;
                                                                                                                                                                               773
                           A
0,
Score 406.6; DB
Pred. No. 2e-75;
0; Mismatches
                                                                                                                                                         specific gene F:
human; prostate
                           242
                           ü
                           162
                                                                                                                                                               F1-12.
                           ဝှ
<u>ن</u>
          ۲:
Indels
          Length
                           197
                           ..
0,
Gaps
                                     prostate
                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                   240
0
```

```
VE1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
  В
                δõ
                                       밁
                                                      δÃ
                                                                             В
                                                                                          δÃ
                                                                                                                 뫄
                                                                                                                                  οy
                                                                                                                                                       밁
                                                                                                                                                                     δÃ
                                                                                                                                                                                             망
                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         V61141 standard;
V61141;
                                                                                                                                                                                                                                                                                                                                                                               27-AUG-1998.
25-FEB-1998; U03492.
09-FEB-1998; US-020956.
25-FEB-1997; US-806099.
01-AUG-1997; US-904804.
(CORI-) CORIXA CORP.
Dillon DC, Xu J;
WPI: 98-609886/51.
                                                                                                                                                                                                                                                                                         Polypeptides comprising immunogenic portions of prostate proteins - used in a vaccine for the treatment of prostate cancer Claim 3; Page 35; 130pp; English.

The present sequence is a new DNA which encodes an immunogenic portion of a prostate tumour protein. The encoded immunogen, or the DNA itself, can be used as a vaccine for the treatment of prostate cancer. The DNA was identified by analysis of a subtracted cDNA library with a normal tissue cDNA library.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-JAN-1999
5' cDNA sequ
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
WO9837093-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Prostate;
                                                                                                                                                                          675
                                                                                                                                                                                             415
                                                                                                                                                                                                                 615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            915
                     915
                                                           855
                                                                                                                                    735
                                                                                                                                                        355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     235
                                        175
                                                                              235
                                                                                                795
                                                                                                                  295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    55
                                                                                                                                                                                                                                    Local Similarity
les 409; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -JAN-1999 (first entry)
cDNA sequence of prosta
ostate; cancer; tumour;
                                                                                                                                                     ggacagcagatggggaattcatggctgttggagcaatagaaccccagttctacgagctgc 734
                                                                                                                                                                                           gcccccgccctgcacctctgctgttaaacaccccagccatcccttcttcaaaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ttcatcatgatcacaacaaggaacggggctcgtttatcaccagtgaggagcaggagcgtga
                                                                            ttcatcatgatcacaacaaggaacggggctcgtttatcaccagtgaggagcaggacgtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCATCATGATCACAACAAGGAACGGGGCTCGTTTATCACCAGTGAGGAGCAGGACGTGA
                                                 gtcaaatctttgacggcacagatgcctgtgtgactccggttctgacttttgaggaggttg
                                       GTCAAATCTTTGACGGCACAGATGCCTGTGTGACTCCGGTTCTGACTTTTGAGGAGGTTG
                                                                                                                                                                                                                                   25.1%;
nilarity 98.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               prostate tumour umour; vaccine;
                                                                                                                                                                                                                                                                                   154 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     773
                                                                                                                                                                                                                                   Score 406.6; DB Pred. No. 2e-75; Mismatches
                                                                                                                                                                                                                                                                                   242 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g F1-12.
ogen; clone;
                                                                                                                                                                                                                                                                                   162 G;
                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                   197
                                                                                                                                                                                                                                                                                   H;
                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                             356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    176
  56
                    974
                                    116
                                                          914
                                                                             176
                                                                                              854
                                                                                                                 236
                                                                                                                                                                                                                                    0
```

```
δÃ
                                                             Q
                                                                                   밁
                                                                                                       οy
                                                                                                                                B
                                                                                                                                                 Qy
                                                                                                                                                                             밁
                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                        RESULT
V58510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                         망
                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 97.3
Matches 408; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                therapy; ss.

Homo saptens.

W09837418-A2.

27-AUG-1998. U03690.

25-FEB-1998; U03690.

25-FEB-1997; US-806596.

01-AUG-1997; US-904809.
                                                                                                                                                                                                                                                                                                                                                                                     Novel human prostate specific tumour protein and fragments - useful for detecting and treating prostate cancers Claim 1; Page 50; 141pp; English.

This sequence represents a human prostate tumour specific gene, and car be used in the method of the invention. The method is for detecting prostate cancer comprises contacting a biological sample with an agent able to bind an immunogenic portion of a prostate protein (such as encoded by this sequence). An antibody which binds to an immunogenic portion of the prostate protein, and the method can be used to detect, monitor progression of, or treat prostate cancers. The antibody may also be conjugated to a therapeutic agent for use in therapy of prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            V5851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CORI-) CORIXA COR
Dillon DC, Xu J;
WPI; 98-480805/41.
                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        V58510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 975
                                                               930
                                                                                                            870
                                                                                                                                181
                                                                                                                                                      810
                                                                                                                                                                             121
                                                                                                                                                                                                                                               690
                                                                                                                                                                                                                                                                                           630
361
                                         301
                                                                                    241
                                                                                                                                                                                                 750
                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              55
                                                                                                                                                                                                                                                                     ш
                                                                                   gactaaagtctgatgaacttcccaatcagatgagcatggatgattggccagaaatgaaga 809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCCCCGCCCTGCACCTCTGCTGTTAAACACCCCAGCCATCCCTTCTTCAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gcccccgccctgcacctctgctgttaaacaccccagccatcccttctttcaaaaag
          ctctgctgttaaacaccccagccatcccttctttcaaaagggatcctttcataggagaac
                                                      acaaggaacggggctcgtttatcaccagtgaggagcaggacgtgagcccccgccctgcac
CTCTGCTGTTAAACACCCCAGCCATCCCTTCTTTCAAAAGGGATCCACTACTTCTAGAGC
                                          ACAANGAACGGGGCTCGTTTATCACCANTGAGGAGCAGGACGTGAGCCCCCGCCCTGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            te tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       e
f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
f prostate tumour ;
ur specific gene;
                                                                                                                                                                                                                                                                                                                                                                      BP;
                                                                                                                                                                                                                                                                                                                         24.9%;
                                                                                                                                                                                                                                                                                                                                                                      184 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        793
                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                               Score 403.2; DB Pred. No. 1e-74; O; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         specific gene K1
human; prostate
                                                                                                                                                                                                                                                                                                                                                                      200 C;
                                                                                                                                                                                                                                                                                                                                                                      189
                                                                                                                                                                                                                                                                                                                                      DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     K1-48
                                                                                                                                                                                                                                                                                                                 12;
                                                                                                                                                                                                                                                                                                                                    ۲,
                                                                                                                                                                                                                                                                                                                                                                      <u>ი</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cancer;
                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                      200
                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1029
                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                         929
                                                                                                                                                                                                                                                                                          689
                                                                                                                                                      869
                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                    60
                                                                                                                                240
                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        can
                                                                                                                                                                                                                                                                                                                 0
```

```
RESULT
V58480
ID V7
AC V7
DT 01
DT 01
DT 01
DT 02
DT 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.

WO9837093-A2.

27-AUG-1998.
25-FEB-1998; US-020956.
25-FEB-1998; US-020956.
25-FEB-1997; US-806099.

OLAUG-1997; US-904804.

(CORI-) CORIXA CORP.

Dillon DC, Xu J;
Homo sapiens.
W09837418-A2.
27-AUG-1998.
25-FEB-1998; U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI: 98-609886/51.

Polypeptides comprising immunogenic portions of prostate proteins - used in a vaccine for the treatment of prostate cancer Claim 12; Page 48-49; 130pp; English.

The present sequence is a DNA which encodes an immunogenic portion of a prostate tumour protein. The encoded immunogen, or the DNA itse can be used as a vaccine for the treatment of prostate cancer. The E was identified by analysis of a subtracted cDNA library obtained by subtracting a prostate tumour cDNA expression library with a normal tissue cDNA library.

Sequence 793 BP; 184 A; 200 C; 189 G; 200 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          V61276;
                                                                                                           Prostate tumour therapy; ss.
                                                                                                                                                     V58480;
08-DEC-1998 (first entry)
3' fragment of prostate tu
                                                                                                                                                                                                                      V58480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-JAN-1999 (first 3' cDNA sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                       930
                                                                                                                                                                                                                                                                                                                                                                       990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           630
                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   _
                                                                                                                                                                                                                                                                                                                    ctctgctgttaaacaccccagccatcccttctttcaaaagggatcctttcataggagaac
                                                                                                                                                                                                                                                                                                                                                                                                        gactaaagtctgatgaacttcccaatcagatgagcatggatgattggccagaaatgaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gacagaacatgttggatggtggagcacctttctatacgacttacaggacagcagcagatgggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aattcatggctgttggagcaatagaaccccagttctacgagctgctgatcaaaggacttg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATTCATGGCTGTTGGAGCAATANAACCCCAGTTCTACGAGCTGCTGATCAAAGGACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACAGAACATGTTGGATGGTGGAGCACCTTTCTATACGACTTACAGGACAGCAGATGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        408;
                                                                                                                                                                                                                    standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                        prostate tumour
r specific gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rst entry)
of prostate
; tumour; vac
                                                                                                                                                                                                                    cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24.98;
                                                                                                                                                                                                                    816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              vaccine;
                                                                                                                                                                                                                    ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 403.2;
Pred. No. 1e-7
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tumour
                                                                                                                        specific gene F1-12.
human; prostate cano
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immunogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       le-74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            clone;
                                                                                                                             cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                             detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   itself,
                                                                                                                                                                                                                                                                                                                                                                   1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
V61140
ID 106
ID V6
AC V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 405
                                                                     Homo sapiens.

WO987093-A2.

27-AUG-1998; U03492.
25-FEB-1998; US-02095
09-FEB-1997; US-90609
01-AUG-1997; US-90480
(CORI-) CORIA CORP.
D1110n DC, Xu J.
WPI; 98-609886/51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-FEB-1997; US-806
01-AUG-1997; US-904
(CORI-) CORIXA CORP
D111cn DC, Xu J;
WPI; 98-480805/41.
                                                                                                                                                                                                                                                             V61140;
06-JAN-1999 (first entry)
3' cDNA sequence of prostate tumour clone F1-12.
Prostate; cancer; tumour; vaccine; immunogen; c!
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel human prostate specific tumour protein and fragments - useful for detecting and treating prostate cancers Claim 1; Page 35; 141pp; English.

This sequence represents a human prostate tumour specific gene, and can be used in the method of the invention. The method is for detecting prostate cancer comprises contacting a biological sample with an agent able to bind an immunogenic portion of a prostate protein (such as encoded by this sequence). An antibody which binds to an immunogenic portion of the prostate protein, and the method can be used to detect, monitor progression of, or treat prostate cancers. The antibody may also be conjugated to a therapeutic agent for use in therapy of prostate
Polypeptides comprising immunogenic used in a vaccine for the treatment Claim 3; Page 35; 130pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                    V61140 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    65
                                                                                                                                                                                                                                                                                                                                                                                                                                                 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atgcctgtgtgactccggttctgacttttgaggaggttgttcatcatgatcacaacaagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ttgcagatgtatttgcaaagaagacgaaggcagagtggtgtcaaatctttgacggcacag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 agtctgatgaacttcccaatcagatgagcatggatgattggccagaaatgaagaagaagt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tggctgttggagcaatagaaccccagttctacgagctgctgatcaaaaggacttggactaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGCCTGTGTGACTCCGGTTCTGACTTTTGAGGAGGTTGTTCATCATGATCACAACAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGCTGTTGGAGCAATAGAACCCCAGTTCTACGAGCTGCTGATCAAAGGACTTGGACTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGCAGATGTATTTGCAAAGAAGACGAAGGCAGAGTGGTGTCAAATCTTTGACGGCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTCTGATGAACTTCCCAATCAGATGAGCATGGATGATTGGCCAGAAATGAAGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tch 24.7%; al Similarity 98.1%; 405; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      816
                                                                                                                                          US-020956.
US-806099.
US-904804.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВP;
                                                                                                                                                                                                                                                                                                                                                                                                 CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Α,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 400.2; DB 1
Pred. No. 4.3e-74;
D; Mismatches 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    205 C;
                          of prosta
                       rtions of prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      208 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J--1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                          prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₩.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 816;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               may
prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

Length

ω --

```
RESULT
Q44447
                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δõ
             388
                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8888888
                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Ma
Best Loc
Matches
                                                                                                            J06038763-A.
15-FEB-1994
12-MAR-1993; 077367.
13-MAR-1992; JP-088418.
(ASAH ) ASAHI CHEM IND C
WPI; 94-094831/12.
                                                                                                                                                                                                             Q44447;
30-SEP-1994 (;
Cephalosporin (
Cephalosporin (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of a prostate tumour protein. The encoded immunogen, or the DNA can be used as a vaccine for the treatment of prostate cancer. The was identified by analysis of a subtracted cDNA library obtained subtracting a prostate tumour cDNA expression library with a norm tissue cDNA library.
                                    A DNA fragment contg. a gene used in the bio-synthesis of cephalosporin C - used to produce recombinants with improved biosynthesis of cephalosporin C Claim 4; Page 12-13; 19pp; Japanese.

The sequences given in Q44446-47 encode the cephalosporid C gwere isolated from A. crisogenum. These gene fragments may k in the biosynthesis of cephalosporin C and in the production
                                                                                                                                                                                    Acremonium
Key
cds
                                                                                                                                                                                                                                                 044447
                    crisogenum strains with improved capabilities.
                                                                                                     P-PSDB; R49827
                                                                                                                                                                                                                                                                                                                                                                                        876
                                                                                                                                                                                                                                                                                                                                                                                                                            816
                                                                                                                                                                                                                                                                                               365
                                                                                                                                                                                                                                                                                                                996
                                                                                                                                                                                                                                                                                                                                  305
                                                                                                                                                                                                                                                                                                                                                    936
                                                                                                                                                                                                                                                                                                                                                                      245
                                                                                                                                                                                                                                                                                                                                                                                                          185
                                                                                                                                                                                                                                                                                                                                                                                                                                             125
                                                                                                                                                                                                                                                                                                                                                                                                                                                               756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match
                                                                                                                                                                                                                                                                   11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    u
                                                                                                                                                                                                                                                                                                                                                                    TGTTAAACACCCCAGCCATCCCTTCTTCAAAAGGGATCCACTAGTTCTAGAA
                                                                                                                                                                                                                                                                                                        tgttaaacaccccagccatcccttctttcaaaagggatcctttcataggagaa
                                                                                                                                                                                                                                                                                                                                           aacggggctcgtttatcaccagtgaggagcaggacgtgagcccccgccctgcacctctgc
                                                                                                                                                                                                                                                                                                                                                                                                       ttgcagatgtatttgcaaagaagacgaaggcagagtggtgtcaaatctttgacggcacag
                                                                                                                                                                                                                                                                                                                                                                                                                                           AACGGGGCTCGTTTATCACCAGTGAGGAGCAGGACGTGAGCCCCCGCCCTGCACCTCTGC
                                                                                                                                                                                                                                                 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                       chrysogenum.
              1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   816 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                             C cDNA fragment.
C; A. crisogenum;
                                                                                                                                                                 52. .1203
/*tag= a
/product=
              ₽P;
                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24.7%;
98.1%;
                                                                                                                                                                                                                                                 ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    189
                                                                                                                       ၀
              272
                                                                                                                                                                                                                                                 mRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Α,
                                                                                                                                                                 Cephalosporin
            Α;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score
Pred.
                                                                                                                                                                                                                                                 1462
                                                                                                                                                                                                              biosynthesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    205
                             cephalosporin
             426
                                                                                  in the bio-synthesis of recombinants with improved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                ВP
            ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.2; DB 1;
4.3e-74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    208
            482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>ი</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                              fermentation;
            <u>ن</u>
                             C
                             fermentation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  H
                                                                                                                                                                                                                                                                                                               1048
                                                                                                                                                                                                                                                                                              417
                                              gene and
be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                      of,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                portion
A itself,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               γd
                                                                                                                                                                                                                                                                                                                                                                                                                         875
                                                                                                                                                                                                                                                                                                                                                                                                                                                              815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     695
                                                                                                                                                                                                                                                                                                                                                                                       935
                                                                                                                                                                                                                                                                                                                                                                                                        244
                                                                                                                                                                                                                                                                                                                                                                                                                                            184
                                                                                                                                                                                                                                                                                                                                                    995
                                                                                                                                                                                                                                                                                                                                                                    304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0:
```

Q44448 standard Q44448; 30-SEP-1994 (1 Cephalosporin C Cephalosporin C Acremonium chry

chrysogenum

C; A. gene

crisogenum; entry)

biosynthesis;

standard;

DNA;

ВP

```
RESULT
Q44448/
ID Q4
AC Q4
AC Q4
DT 30
DE Ce
KW Ce
OS AC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                          밁
                                                                                                                                                           Š
                                                                                                                                                                                                Š
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    占
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                  Š
                                                                                                                                                                               밁
                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 511; Conser
                                                           )/c 12
                                                                                                  919
                                                                                                                     848
                                                                                                                                           859
                                                                                                                                                                                                   728
                                                                                                                                                                                                                       739
                                                                                                                                                                                                                                           674
                                                                                                                                                                                                                                                             679
                                                                                                                                                                                                                                                                               614
                                                                                                                                                                                                                                                                                                    619
                                                                                                                                                                                                                                                                                                                       554
                                                                                                                                                                                                                                                                                                                                           559
                                                                                                                                                                                                                                                                                                                                                               494
                                                                                                                                                                                                                                                                                                                                                                                   499
                                                                                                                                                                                                                                                                                                                                                                                                       434
                                                                                                                                                                                                                                                                                                                                                                                                                          439
                                                                                                                                                                                                                                                                                                                                                                                                                                            374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             142
                                                                                                                                                                                799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17
                                                                                                                                                                                                                                                                                                                                         gctgacttcgggggcgcgtgtggtacgcgtggaccggcccggctcccgctacgacgtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ggcatctcggtcatggagctgtccggcctggccccggggcccgttctgtgctatggtcctg
                                                                                                            atcaactatttggctttgtcaggtgttctctccaaaaattggcagaagtggtgagaatccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tatgccaggctgagtggatttggccagtcaggaagcttctgccggttagctggccacgat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atggagaaactccagctgggcc---cagagattctgcagcgggaaaatccaaggcttatt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gtgctgcggcgtctgtgcaagcggtcggatgtgctgctgctggagcccttccgccgcgggtgtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cgcttgggccggggcaagcgctcgctagtgctggacctgaagcagccgcgggggagccgcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGACTATGGCGCCTCAGTACTCCGCATCGACGGACCGCGATCCC---CAAAGGGGGGAC
                                                                                                  GAGTGGGCGGAGGTCTTTGACGGGACGGATGCCTGCGTCACCCCGGTCCTG
                                                                                                                                         GCCAATTGGCCGAGACTGAGGGCGCTATTCGAGGCAAAATTTGCGGAGAGGACGCGCAGC
                                                                                                                                                   GAGGTGCTGGTGCGAGGTCTGGGCCTGGACAAGACGGACCTGCCTCCGCGGGAGGATAGG
                                                                                                                                                                                                                                          aggaca----
                                                                                                                                                                                                                                                             TGGGGTTCCCCGCGGGGCGAGAATGTCCTGGACGGAGGGTGCCCCTGGTATGCGACATAC
                                                                                                                                                                                                                                                                       tgggaagcacctcgaggacagaacatgttggatggtggagcacctttctatacgacttac
                                                                                                                                                                                                                                                                                                   ATGGTGGACGGGTCTGCGTACCTGGCCACGATGCCGCGCCTGGCGACCAAGACGCCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                          ATCAACTACCTCGCCGTGTCTGGCGTCCTGGCTATGCTTGGTAGGGCAGGCGAGAATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCGCCCGTCTCACCGGCTTCCGCCGAGATGGCAAGTACCAGGACATGGCAGGCCATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGAGCGTCTGGGGGCTCTCCCCCACAGAGGTCCTTCTCAAGGCGAATGCCCGCCTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGCTCCTCCATCCTGTCCCGCGCGCGGACGTGCTCATCGACCCGTTCCGGCCCGGCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCCTGGCGAGGAACAAGTCGTCCATCTGCATCGACTTGAAGCATCCGCCCTCACGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                 15.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    248.2; DB 1
No. 1.1e-42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141
                                                                                                                                                             847
                                                                                                                                                                                                                                                                                                                                                                                   558
                                                                                                                                                                                                                                                                                                                                                                                                      493
                                                                                                                                                                                                                                                                                                                                                                                                                          498
                                                                                                                                                                                                                                                                                                                                                                                                                                             433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        76
                                                                                                                                         918
                                                                                                                                                                               858
                                                                                                                                                                                                   787
                                                                                                                                                                                                                                                            738
                                                                                                                                                                                                                                                                               673
                                                                                                                                                                                                                                                                                                    678
                                                                                                                                                                                                                                                                                                                       613
                                                                                                                                                                                                                                                                                                                                          618
                                                                                                                                                                                                                                                                                                                                                               553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      258
                                                                                                                                                                                                                      798
                                                                                                                                                                                                                                          727
```

```
Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A DNA fragment contg. a gene used in the bio-synthesis of cephalosporin C - used to produce recombinants with improved blosynthesis of cephalosporin C claim 5; Page 14-15; 19pp; Japanese. This sequence represents the cephalosporin C gene and was isolated from A. crisogenum. This gene fragment may be used in the biosynthesis of cephalosporin C and in the production of A. crisogenum strains with improved cephalosporin C fermentation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-FEB-1994.
12-MAR-1993;
13-MAR-1992;
                                                                                                                                 1108
                                                                                                                                                                                                                                                                                                                               1288
                                                                                                                                                                                                                                                                                                                                                                                              1348
                                                                1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1525 CTCCAGGCCCATTCTGTGGCATGCTCTTGGCAGACTATGGCGCCTCAGTACTCCGCATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         capabilities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 94-094831/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        intron
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       intron
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-MAR-1992; JP-088418.
(ASAH ) ASAHI CHEM IND CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       intron
 886
                                                                                                                                                                                                                                                                                                                                                                                                                              228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 57.1 nes 491; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           48
                                                           CCGGAGGGGGCGCCATGTGCGTCGTGGGAATTCTGCTGGCGCTCGTATCGCGCGATGCCA
                                                                                                                                              ctggtggtggccttatgtgtgcactgggcattataatggctctttttgaccgcacacgca
                                                                                                                                                                                              CTATGCTTGGTAGGGCAGGCGAGAATCCCTTCCCGGCGGCCCAACATCCTCGGCGACTTTG
                                                                                                                                                                                                             caaaaattggcagaagtggtgagaatccgtatgccccgctgaatctcctggctgactttg
                                                                                                                                                                                                                                                                              ttctgcagcgggaaaatccaaggcttatttatgccaggctgagtggatttggccagtcag
                                                                                                                                                                                                                                                                                                                                                                                                             tyctgctggagcccttccgccgcggtgtcatggagaaactccagctgggcc---cagaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCGACTTGAAGCATCCGCCCTCACGCAAGGTGCTCCTCTCCATCCTGTCCCGCGCGGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tggacctgaagcagccgcggggagccgccgtgctgcggcgtctgtgcaagcggtcggatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACGGACCGCGATCCCCAAAGGGGGGACGTCC---TGGCGAGGAACAAGTCGTCCATCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccccgggcccgttctgtgctatggtcctggctgacttcggggcgcgtgtggtacgcgtgg
TGCCGCGCCTGGCGACCAAGACGCCCTTCTGGGGTTCCCCGCGGGGGGGAATGTCCTGG
                            ttctgtggaaaactcagaatcgagtctgtgggaagcacctcgaggacagaacatgttgg
                                                                                                                                                                                                                                                             GCAAGTACCAGGACATGGCAGGCCATGATATCAACTACCTCGCCGTGTCTGGCGTCCTGG
                                                                                                                                                                                                                                                                                                                            TCCTTCTCAAGGCGAATGCCCGCCTGGTGGTCGCCCGTCTCACCGGCCTTCCGCCGAGATG
                                                                                                                                                                                                                                                                                                                                                                                            TGCTCATCGACCCGTTCCGGCCCCGCGTCCTGGAGCGTCTGGGGCTCTCCCCCACAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5537 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag=
4839. .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers 1613. .1520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      _ d
.4891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1204 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 234.8;
Pred. No. 9.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1673 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .1e-40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1516 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1144 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                            1229
                                                                                                                                                                                                                                                                                                                                                                                            1289
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1466
                                                                                                                             1049
                                                                                                                                                                                                                             464
                                                                                                                                                                                                                                                                                           404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         167
929
                              644
                                                                                                                                                                                                                                                                                                                                                            344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ω
--
```

ρy D 5 В 8 밁 ô

टु Q 밁 Š В δÃ В Ωy В Ş B 9

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                          US5605815-A.
25-FEB-1997.
14-MAR-1988; 167593.
14-MAR-1988; US-167593.
14-FEB-1992; US-839722.
21-JUN-1994; US-263242.
(UYYA) UNIV YALE.
Broadus AE, Mangin M,
WPI; 97-153577/14.
Claim 2; Fig 1, Fig 8; 15pp; English.

DNA clones HHM-8 (T59700) and HHM-4 (T59701) code for PTH-like peptides (W12724 and W12725, respectively), which are humoral mediators of humoral hypercalcaemia of malignancy (HHM). A cDNA library prepd. from SKRC-1 cells, which secrete HHM factor, was screened with a probe based on amino acids 6-18 of the N-terminal region of an isolated PTH-like peptide, to isolate the 2 strongly positive clones, lambda HHM-4 and HHM-8. These clones, or portions of them coding for the mature peptide or for the mature peptide plus leader, can be incorporated into vectors and used to produce recombinant PTH-like peptides in host cells for use in the diagnosis of HHM. The HHM sequences are derived from human chromosome 12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              759701;
07-JUL-1997 (first entry)
PTH-11ke peptide DNA clone HHM-4.
PTH-11ke peptide; parathyroid hormone; parathormone; agon adenylate cyclase; humoral hypercalcaemia of malignancy;
                                                                                                                                                                                     DNA encoding parathyroid hormone-like recombinant peptide, used to diagnose
                                                                                                                                                                       malignancy
                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            signal_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                         polya_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              T59701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cctgtgtgactccggttctg
|||| || || |||| ||| ||||
CCTGCGTCACCCCGGTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ctgatgaacttcccaatcagatgagcatggatgattggccagaaatgaagaagtttg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ctgttggagcaatagaaccccagttctacgagctgctgatcaaaggacttggactaaagt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cagatgtatttgcaaagaagacgaaggcagagtggtgtcaaatctttgacggcacagatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGACGGACCTGCCTCCGCGGGAGGATAGGGCCAATTGGCCGAGACTGAGGGCGCTATTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCGTGGGAGCGCTGGAGCCTCACTTCTACGAGGTGCTGGTGCGAGGTCTGGGCCTGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             standard; DNA; 2123
                                                                                                                                                                                                                                                                                                                                                                                         2006. .2011
/*tag= f
1062. .1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag" a 939. 1547
/*tag" b 939. 1046
/*tag" C 1047
/*tag" C 1544
/*tag" d 1545. 2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer;
                                                                                                                                                                                                                                                                                                                                          /*tag= g
/note= "nucleotide region corresponding to
/note= "nucleotide region corresponding to
used to screen SKRC-1 cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diagnosis; ss.
                                                                                                                                                                                                                                            Stewart AF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            868
                                                                                                                                                                                   peptide - for prodn. o humoral hypercalcaemia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      parathormone; agonist;
                                                                                                                                                                                                  of.
                                                                                                                                                                                                                                                                                                                                                                  probe
                                                                                                                                                                                     0f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      869
```

```
RESULT
V61487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
V09116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                В
                                                                                                                  δÃ
                                                                                                                                          g
                                                                                                                                                             δÃ
                                                                                                                                                                                  В
                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                CCCCCCPTT DRAPP PROCESTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
    E PA E
                                                                                                                                                                                                                             Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                               13-JAN-1998.
26-JUL-1996; 686878.
26-JUL-1996; US-686878.
(GEMY) GENETICS INST INC.
(JACO/) JACOBS K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1943
                                                                                                                                                                                                                                                                              This sequence is the 3' nucleotide sequence for the K446_2 clone, which is isolated from the murine bone marrow cDNA library. When the K446_2 sequence was searched in the Genbank database, the clone demonstrated homology with any of the known sequences.

Sequence 208 BP; 109 A; 12 C; 23 G; 43 T;
Human secreted protein fe366_1 cDNA. Secreted protein; human; fe366_1; ds
                                                                                                                    1579
                                                                                                                                                                                                                                                                                                                                                                                 Evans C, Jacobs K, LaVallie ER, McCoy JM, Merberg Racie LA, Spaulding V, Treacy M; WPI; 98-109352/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                      11-JAN-1999
                                          V61487 standard;
                                                                                                                                                                                                                                                                                                                                                   differentiation
                                                                                                                                                                                                                                                                                                                                                                       Human testes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               V09116 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US5708157-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-MAY-1998
                                                                                                154
                                                                                                                                                                                                                                                                                                                                                           aboratory use, or
                                                                                                                                         94
                                                                                                                                                                                  34
                                                                                                                                                                                                                                                                                                                                       lsclosure; Column 71-74; 48pp; English.
                                                                15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -MAY-1998 (first entry)
nucleotie sequence of clone K446_2.
nucleotie cDNA library; murine bone
11 differentiation; ss.
                                                                                                         atatattottgaagacatogatatacatttattacactottgattotacaatgtagaaa 1530
                                                                                                                                                                                  GAAAAAGGNATGGAACGTGGTNCCAATTGTTNATTTTCCTTNATTTATTCCCNGTAANTT
                                                                                                                                                                                                ATATAAACTATGTCATATATAAACATATATATAAAACATATATGTATATAGTAAACA 2002
                                                                                                                                                       acaatgtagaaaatgaggaaatgccacaaattgtatggtgataaaagtcacgtgaaacaa 1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    АЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛА 2093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99;
                                                                                                                                                                                                                            ch 4.1%;
l Similarity 58.9%;
96; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                          derived cDNA and protein(s) - se, or for stimulating cell pro
                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP;
                                          CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ۶
                                                                                                                                                                                                                            ; Score 66.6; D:
; Pred. No. 1.8e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₽₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                          ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 67.8; DI
Pred. No. 1.9e
O; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ç
                                                                                                                                                                                                                                                                                                                                                          ) - may be useful proliferation and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ມ8 1;
1.9e-05;
                                                                                                                                                                                                                                    DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    marrow;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 52;
                                                                                                                                                                                                                             67;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>ن</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cel1
                                                                                                196
                                                                                                                   1621
                                                                                                                                                                                                                                                Length 208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                      Ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                        · ·
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      417
                                                                                                                                                                                                                                                                                                                                                            and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                  e, which K446_2
                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                  93
                                                                                                                                                                                                                                                                                                       no
                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
```

Search completed: June Job time: 4063 sec '

19,

2000,

```
밁
                              δÃ
                                                                  밁
                                                                                                                                  밁
                                                                                                                                                               δÃ
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                          CC CDNAs encoding secreted proteins, or was identified as encoding CC a secreted or transmembrane protein. The nucleotide sequence shows CC analysis of the encoding protein. The nucleotide sequence shows CC homology to some database sequences, and may contain a CAA repeat CC (see V61477-87) from human foetal kidney, adult testis, and adult CC or foetal brain cDNA libraries that code for secreted proteins CC (see W79087-97). These clones are deposited as ATCC 98364. The polynucleotides and proteins are predicted to have useful CC biological activities which would make them suitable for treating, CC enimals, although no supporting data is given. Suggested activities include nutritional, immune stimulating (e.g. as vaccines) or suppressing, haematopoissis regulating, tissue growth, cativinyinhibin, chemotactic/chemokinetic, haemostatic and thrombolytic, receptor/ligand, antinflammatory, cadherin/tumour inhibition activities. The polynucleotides are also stated to be useful for gene therapy. Sequence 4237 BP; 1330 A; 778 C; 784 G; 1338 T;
                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 118; Conserv
2498
                                  1596
                                                                 2438
                                                                                                 1536
                                                                                                                                  2378
                                                                                                                                                                  1476
                                                                                                                                                                                                   2318
                                                                                                                                                                                                                                   1416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 36; Page 88-91; 112pp; English.
This full-length cDNA clone, designated fe366_1, codes for secreted human protein (see W9096). It was isolated from adult brain cDNA library using methods which are selective
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New polynucleotide(s) encoding secreted from human foetal kidney, adult testes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Agostino MJ, Jacobs K, LaVallie ER, Racie LA, Spaulding V, Treacy M; WPI; 98-521163/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cDNA libraries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P-PSDB; W79096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W09841539-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-SEP-1998.
19-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GEMY ) GENETICS INST INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-MAR-1998; US-040963.
19-MAR-1997; US-820493.
                                                                                                                                                                                                   TTTATATACTATTTCAATATTACTATCTGCATTTGTTTTAATATAAAAATGTTTGCTGCC 2377
                                                                                  ttottgaagacatogatatacatttatttacactottgattotacaatgtagaaaatgag 1535
                                                                                                                                                                                                                                 ttgatattaagattcttgacttatattttgaatgggttctagtgaaaaaggaatgatata 1475
 AAAAAAAAAAAAAAAAAAAAAAA
                                  aaaaaaaaaaaaaaaaaaaa 1621
                                                                 4.0%;
nilarity 57.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers 3746. .4030 /*tag= a
                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                Score 65.2; DB 1;
Pred. No. 7.9e-05;
0; Mismatches 88
 2523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    МсСоу
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d human proteins - derived and adult or foetal brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JM,
                                                                                                                                                                                                                                                                    88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Merberg
                                                                                                                                                                                                                                                                                                 Length 4237;
                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 r a novel
n a human
e for
                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                  2437
```

Qу

Qy Db Qy

Qy Db Survival motor neu

```
59.2
59.2
                                      1582
2001
      35
36
                                                    T59700
                                                                                              PTH-like peptide D
                                                    Q04107
                                                                                              Human pro-urokinas
Human retinoid rec
      38
39
                58.6
                            3.6
                                      2233
                                                     V10120
                58.6
                                      2377
                                                    020360
                                                                                              Human pro-urokinas
                                                     x33181
                                                                                              Base sequence of t
Base sequence of t
Cowpox virus bsr f
      41
42
                58.6
58.6
                                      7372
7797
                            3.6
                                                    X33182
                            3.6
                                                    X33180
X33184
       43
                                      7996
                                                                                              Base sequence of t
      44
45
                   58
                            3.6
                                      1536
                                                    Q94111
V84632
                                                                                              mML genomic DNA. T
                                                                                              Human secreted pro
                                                         ALIGNMENTS
RESULT
V58584
        V58584 standard; cDNA; 1621 BP.
ID
        V58584;
        08-DEC-1998 (first entry)
        Prostate tumour specific gene clone F1-12.
Prostate tumour specific gene; human; prostate cancer; detection;
        therapy; ss.
os
        Homo sapiens.
FΗ
       Kev
                                 Location/Qualifiers
                                5. .1153
/*tag= a
       CDS
FT
PN
       WO9837418-A2.
       W09837418-A2.
27-AUG-1998.
25-FEB-1998; U03690.
09-FEB-1998; US-904809.
25-FEB-1997; US-806596.
PF
PR
       Ol-AUG-1997; US-904809.

(CORI-) CORIXA CORP.

Dillon DC, Xu J;

WPI: 98-480805/41.

P-PSDB; W69383.
PR
PA
DR
DR
       Novel human prostate specific tumour protein and fragments - useful for detecting and treating prostate cancers

Claim 1; Page 81-82; 141pp; English.

This sequence represents a human prostate tumour specific gene, and can be used in the method of the invention. The method is for detecting
PT
PT
PS
CC
CC
CC
       prostate cancer comprises contacting a biological sample with an agent able to bind an immunogenic portion of a prostate protein (such as encoded by this sequence). An antibody which binds to an immunogenic portion of the prostate protein, and the method can be used to detect, monitor progression of, or treat prostate cancers. The antibody may also be conjugated to a therapeutic agent for use in therapy of prostate
CC
CC
CC
CC
CC
SQ
       cancers.
                        1621 BP;
                                            461 A:
                                                            330 C:
       Sequence
                                                                           412 G:
                                                                                            418 T:
   Query Match 100.0%; Score 1621; DB 1; Length 1621; Best Local Similarity 100.0%; Pred. No. 0;
  Matches 1621; Conservative
                                                    0:
                                                         Mismatches
                                                                                0; Indels
                                                                                                       0; Gaps
                                                                                                                          0:
            Db
          Db
```

T28259

This Page Blank (uspto)

```
유왕
                                                                     1141
                                                                                                      1081
                                   1201
                                                    1201
                                                                                                                                       1021
                                                                                                                      1801
                                                                                                                                                       1021
                                                                                                                                                                                                         106
                                                                                                                                                                        961
                                                                                                                                                                                        961
                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                agctagtctctaacttccaggcccacggctcaagtgaatttgaatactgcatttacagtg
                                                                                                  CAGCCGCGAAGAGATTTATCAGCTTAACTCAGATAAAATCATTGAAAGTAATAAGGTAAA
CCACTCTAATCAAGAAAAGAATTACAGACTCTGATTCTACAGTGATGATTGAATTCTAAA
                                                                                                                                    ggagcaggacgtgagcccccgccctgcacctctgctgttaaacaccccagccatcccttc
                                                                                                                                                                                                       TTTTGAGGAGGTTGTTCATCATGATCACAACAAGGAACGGGGCTCGTTTATCACCAGTGA
                                                                                                                                                                                                                ttttgaggaggttgttcatcatgatcacaaccaaggaacggggctcgtttatcaccagtga
                                                                                                                                                                                                                                         GAAGGCAGAGTGGTGTCAAATCTTTGACGGCACAGATGCCTGTGTGACTCCGGTTCTGAC
                                                                                                                                                                                                                                                                                                            CTATACGACTTACAGGACAGCAGATGGGGAATTCATGGCTGTTGGAGCAATAGAACCCCA
                                                                                                                                                                                                                                                                                                                                                                              Cattgatgcaaatatggtggaaggaacagcatatttaagttcttttctgtggaaaactca
                                                                                                                                                                                                                                                                                                                                                                                                                                                  gaaggcagagtggtgtcaaatctttgacggcacagatgcctgtgtgactccggttctgac
                                                                                                                                                                                                                                                                                    gagcatggatgattggccagaaatgaagaagaagtttgcagatgtatttgcaaagaagac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  agctggccacgatatcaactatttggctttgtcaggtgttctctcaaaaattggcagaag
                                                                                                                                                                                                                                                                           GAGCATGGATGATTGGCCAGAAATGAAGAAGAAGTTTGCAGATGTATTTGCAAAGAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTCCGCCGCGGTGTCATGGAGAAACTCCAGCTGGGCCCAGAGATTCTGCAGCGGGAAAA
                                                                                                                                     1080
                                                                                                                                                      1080
                                                                                                                                                                      1020
                                                                                                                                                                                      1020
                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
```

δÃ

В

Ş

밁

B Š 밁 S 문 Ş

δÔ

밁

3. 5 В Š 皮 δô

망 Ş

밁 Ş g

181 181 121

GCCGCGGGGAGCCGCCGTGCTGCGGCGTCTGCAAGCGGTCGGATGTGCTGCTGGAGCC 

240 240 180

ð ₽ Ş 밁 Ş В Ş В õ 밁

```
V61199
ID1199
ID1 V61199
ID V60
DD V60
DD V60
DD V60
DD V60
DD V60
DD V60
PPR 000
PPR 001
PPR 027
PPR 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                       Ş
                                                                                         밁
                                                                                                                          Q
                                                                                                                                                                            B
                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                  Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 1621; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CORI-) CORIXA CORP.
Dillon DC, Xu J;
WPI; 98-609886/51.
P-PSDB; W71867.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W09837093-A2.
27-AUG-1998.
25-FEB-1998;
09-FEB-1998;
09-FEB-1997;
01-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                              polypeptides comprising immunogenic portions of prostate proteins - used in a vaccine for the treatment of prostate cancer claim 3; Page 76-77; 130pp; English.

The present sequence is a new DNA which encodes an immunogenic portion of a prostate tumour protein. The encoded immunogen, or the DNA itsection be used as a vaccine for the treatment of prostate cancer The E was identified by analysis of a subtracted cDNA library obtained by subtracting a prostate tumour cDNA expression library with a normal tissue cDNA library.

Sequence 1621 BP; 461 A; 330 C; 412 G; 418 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Full length cDNA sequence of prostate tumour clone Prostate; cancer; tumour; vaccine; immunogen; clone Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1561
                                                121
                                                                                            13
                                                                                                                                   19
                                                                                                                                                                               -
                                                                                                                                                                          cgccatggcactgcagggcatctcggtcatggagctgtccggcctggccccgggcccgtt
N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atttacactcttgattctacaatgtagaaaatgaggaaatgccacaaattgtatggtgat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; U03492.
; US-020956.
; US-806099.
; US-904804.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cDNA;
                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
                                                                                                                                                                                                                                                                  Score 1621;
Pred. No. 0;
D; Mismatches
                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                              1;
                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           portion
A itself,
                                                                                                                                                                                                                                                               Gaps
                                           180
                                                                                       120
                                                                                                                                 120
                                                                                                                                                                               8
                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                  0
```

`**.** 

1261 ccactctaatcaagaaaagaattacagactctgattctacagtgatgaattctaaa 1320 	0y 1
201 tagagtaacacataacattgtatgcatggaaacatggaggaacagtattacagtgtccta 126	Qy 1 Db 1
141 agctagtototaacttocaggococacggotoaagtgaatttgaatactgcatttacagtg 120	Оу 1 рь 1
 081 cagccgcgaagagatttatcagcttaactcagattaaaaatcattgaaagtaataaggtaaa 11 	Qy 10
021 tttcaaaagggatcctttcataggagaacacactgaggagatacttgaagaatttggatt 108 	Qy 10
961 ggagcaggacgtgagccccgccctgcacctctgctgttaaacaccccagccatcccttc 1020 	Qy S
901 ttttgaggaggttgttcatcatgatcacaacaaggaacggggctcgtttatcaccagtga 960 	
841 gaaggcagagtggtgtcaaatctttgacggcacagatgcctgtgtgactccggttctgac 900 	Qy 8
781 gagcatggatggattggccagaaatgaagaagatgttgcagatgtatttgcaaagaagac 840 	Qy 7
721 gttctacgagctgctgatcaaaggacttggactaaagtctgatgaacttcccaatcagat 780	Qy 7
661 ctatacgacttacaggacagcagatggggaattcatggctgttggagcaatagaacccca 720 	Ωy 6
01 gaaatcgagtctgtgggaagcacctcgaggacagaacatgttggatggtggagcaccttt 66 	Оу 6 рь 6
41 cattgatgcaaatatggtggaaggaacagcatatttaagttcttttctgtggaaaactca 60 	Ωy 5
81 gtgtgcactgggcattataatggctctttttgaccgcacacgcactgácaagggtcaggt 54 	
21 tggtgagaatccgtatgccccgctgaatctcctggctgactttgctggtggtggccttat 48	Qy 4:
61 agctggccacgatatcaactatttggctttgtcaggtgttctctcaaaaaattggcagaag 42 	Oy 30
301 tocaaggottatttatgocaggotgagtggatttggocagtcaggaagcttotgocggtt 360 	Qy 3(
941 cttccgccgcggtgtcatggagaactccagctgggcccagagagattctgcagcgggaaaa 300 	Qy 2,

Qy 1321 aatggttatcattagggcttttgatttataaaactttgggtacttatactaaattatggt 1380
1321 1321 1381 1381 1381 1441 1441 1501
1321 1321 1381 1381 13441 1441 1501
1321 1321 1381 1381 1441 1441
1321 1321 1381 1381 1441 1441
1321 1321 1381 1381 1381
1321 1321 1381 1381
1321 1321 1381
1321 1321
1321

RESULT 3 V58551

Db 1621 A 1621

```
Ş
                                                                                                                                                                                                                                                                                                                                                                             S
                                                                밁
                                                                                        ð
                                                                                                                       용
                                                                                                                                                                                 밁
                                                                                                                                                                                                       δ. β
                                                                                                                                                                                                                                                                                                                                                                         Novel human prostate specific tumour protein and fragments - useful for detecting and treating prostate cancers

Claim 1; Page 64; 141pp; English.

This sequence represents a human prostate tumour specific gene, and can be used in the method of the invention. The method is for detecting prostate cancer comprises contacting a biological sample with an agent able to bind an immunogenic portion of a prostate protein (such as encoded by this sequence). An antibody which binds to an immunogenic portion of the prostate protein, and the method can be used to detect, monitor progression of, or treat prostate cancers. The antibody may ancers.

So Sequence 385 BP; 86 A; 105 C; 94 G; 100 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        000000000
                                                                                                                                                                                                                                                                                                  Query Match 100
Best Local Similarity 100
Matches 385; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
WO9837418-A2.
27-AUG-1998.
25-FEB-1998; US-904809.
09-FEB-1997; US-804809.
25-FEB-1997; US-806596.
01-AUG-1997; US-806596.
(CORI-) CORIXA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        35
37
37
38
39
44
43
43
45
                                   241
                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dillon DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-DEC-1998 (first entry)
Prostate tumour specific gene clone P80.
Prostate tumour specific gene; human; prostate cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      V58544;
08-DEC-1998
       241
                                                                                              181
                                                                                                                            121
                                                                                                                                                       121
                                                                                                                                                                                   13
                                                                                                                                                                                                              61
                                                                                                                                                                                                                                             μ
tgtgctgtgctggagattcacttttgagagagttctcctctgagacctgatctttagagg
                                                                                                                  CCCTTTTAAAAAAAGGGGACTTGCTTAAAAAAAGAAGTCTAGCCACGATTGTGTAGAGCAGC
                                                                                                                                                                             28
27.6
27.6
27.4
27.2
27.2
27.2
27.2
27.2
27.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xu J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3659
6151
1110
5263
5263
2192
2205
2205
831
843
945
1089
                                                                                                                                                                                                                                                                                                               .0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  48
                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N60204
Q75977
V75399
V704036
Q74634
Q74635
N60375
Q04075
V55343
V55366
                                                                                                                                                                                                                                                                                                                Score 385;
Pred. No. 3
                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALIGNMENTS
                                                                                                                                                                                                                                                                                                 3.5e-119;
hes 0;
                                                                                                                                                                                                                                                                                                                              DB 1;
                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               POU domain transcr
Dog 32 kd alveolar
Canine 32K alveola
FLt-3 and IL-3 chi
Fit3L/IgG2b/G-CSF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POU o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Insulin receptor s
Chimeric G-CSF-Flt
LRP5 isoform 4 cDN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Interferon-pseudo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      domain transcr
                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                    prostate
                             300
   300
                                                           240
                                                                                       240
                                                                                                                     180
                                                                                                                                                                                                                                        60
                                                                                                                                                 180
                                                                                                                                                                              120
                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      V61287

ID
V61287

ID
V61287

ID
V7

                                                  δ
                                                                                     밁
                                                                                                            δ
                                밁
                                                                                                                                                 밁
                                                                                                                                                                        S
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 385
```

```
WO9837093 A2.
27-AUG-1998; US-
25-FEB-1998; US-
09-FEB-1997; US-
25-FEB-1997; US-
01-AUG-1997; US-
(CORI-) CORIXA C
                                                                                                           Polypeptides comprising immunogenic portions of prostate proteins used in a vaccine for the treatment of prostate cancer Claim 12: Page 61; 130pp; English.

The present sequence is a DNA which encodes an immunogenic portion of a prostate tumour protein. The encoded immunogen, or the DNA itsecone can be used as a vaccine for the treatment of prostate cancer. The I was identified by analysis of a subtracted cDNA library with a normal subtracting a prostate tumour cDNA expression library with a normal
                                                                                                 subtracting a prostate tumour tissue cDNA library.
                                                                                                                                                                                                                                                     Dillon DC, Xu J; WPI; 98-609886/51.
                                                                                                                                                                                                                                                                                                                                                                                                                     Prosta
                                                                                                                                                                                                                                                                                                                                                                                                                                      cDNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      catagtttctgtgctagtggaccgt 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cctctcccagggccccagcctggccacacctgcttacagggcactctcagatgcccatac
tch 100.0%; al Similarity 100.0%; 385; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                     equence of prostate tumour cl
te; cancer; tumour; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard;
                                                                                                                                                                                                                                                                                                    US-806099.
                                                                                                                                                                                                                                                                                      CORP.
                                                                                    ₽P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                                                                    86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        385
                                                                                   ۶
                                                                                                                                                                                                                                                                                                                                                                                                                                      tumour clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВP
Score 385; DB 1;
Pred. No. 3.5e-119;
; Mismatches 0;
                                                                                    105
                                                                                 ç,
                                                                                                                                                                                                                                                                                                                                                                                                                       immunogen; clone;
                                                                                                                                                                                                                                                                                                                                                                                                                                        P80
                                                                                   94
                                                                                   ဂ္
                             Length 385;
                                                                                    100
                                                                                    H,
                                                                                                                                                                    portion
e DNA itself,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                      DNA
```

```
361
                     361
                                            301
                                                                 301
                                                                                       241
                                                                                                             241
                                                                                                                                   181
                                                                                                                                                          181
                                                                                                                                                                                121
                                                                                                                                                                                                    121
                                                                                                                                                                                                                          23
                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                     سر
                                                                                                                                                                                                                                                                                 1 actacacacactccacttgcccttgtgagacactttgtcccagcactttaggaatgctga
                                          ceteteceagggececageetggecacacetgettacagggeacteteagatgeceatac
                                                                                      ctgggcagtcttgcacatgagatggggctggtctgatctcagcactccttagtctgcttg
                                                                                                                                                                                          cccttttaaaaaaggggacttgcttaaaaaagaagtctagccacgattgtgtagagcagc
                                                                                                                                                                                                                        CATAGTTTCTGTGCTAGTGGACCGT
            catagtttctgtgctagtggaccgt
                                                                                                                                  tgtgctgtgctggagattcacttttgagagagttctcctctgagacctgatctttagagg
                                                                                                                                                                                                                                                                     ACTACACACACTCCACTTGCCCTTGTGAGACACTTTGTCCCAGCACTTTAGGAATGCTGA
                                                                                                                                                                                CCCTTTTAAAAAAGGGGGACTTGCTTAAAAAAGAAGTCTAGCCACGATTGTGTAGAGCAGC
                                                                                                                                                                                                                                                                                                                 0
                     385
385
                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                  180
                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                           60
                                            360
                                                                 360
                                                                                                                                                                               180
                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                     60
                                                                                       300
                                                                                                             300
                                                                                                                                  240
```

0

~ .

This Page Blank (uspto)

GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd. Ç

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Listing first 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                  O
                                                                                                                                                                                                                                                                                                                                                         C
                                                                                                                                                                                                                                                                                                                                                                                                  იი
                      O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŏ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cched:
       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB seq
   nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                length: 0
length: 1000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-232-880-67
385
1 actacacacactcca
                                                                                                                                                                                                                                                                                                               100.0
100.0
21.8
21.8
21.9
9.4
9.4
8.7
7.8
8.7
7.8
7.7
7.7
7.7
7.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N_Geneseq_36:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                June 19, 2000, 18:55:38 ; Search time 94.16 Seconds (without alignments)
1022.982 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       311585 seqs, 125096042 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             actacacactccacttgc.....tttctgtgctagtggaccgt 385
                    385
385
385
429
429
1336
41970
10706
10707
10708
20779
35100
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
13750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length DB
                                                                                                                           V3315
V70956
Q20602
T126941
T126941
T126941
T126941
T126941
T126945
Q11759
V19802
V19941
X15183
V16603
V106149
V106149
V106149
V106149
V106175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       V58544
V61287
X40340
X40340
Q78233
V52306
                                                    V06604
V06604
V32938
V70340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            summaries
Prostate-specific
Prostate-specific
Prepro-NK2 kallikr
Prostate-specific
Prostate-specific
Wild-type human Ka
Prostate-specific
Human Kallikrein 2
Lily LGC1 promoter
Coding strand of n
                                                                                                                                                                                                                                                                  Sequence of human
Nfl gene. DNA sequ
Human neurofibroma
Human gene signatu
P40 genomic DNA. N
Human SCl DNA. Pro
Sequence of T-cadh
KSHV LUR DNA (nucl
KSHV long unique c
CDNA encoding the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Prostate tumour sp
cDNA sequence of p
Prostate tumour sp
cDNA sequence of p
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alkaline serine pr
Streptococcus pneu
cDNA of protein wi
                                                                                                                                                                                                                  Mature prostate-sp
Prostate-specific
Kallikrein hK2 cDN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cDNA sequence of p
Human secreted pro
                                                                                                                                                                                  Prostate-specific
                                                                                                                                                                                                 Pro-hK2 kallikrein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Description
```

Query Match 100.0%; Score 385; DB 1; Best Local Similarity 100.0%; Pred. No. 3.5e-119; Matches 385; Conservative 0; Mismatches 0;

Length 385; ; Indels

0;

Gaps

0

60

ctgggcagtcttgcacatgagatggggctggtctgatctcagcactccttagtcttg

240 300

ś

CTGGGCAGTCTTGCACATGAGATGGGGCTGGTCTGATCTCAGCACTCCTTAGTCTGCTTG

tgtgctgtgctggagattcacttttgagagagttctcctctgagacctgatctttagagg

TGTGCTGTGCTGGAGATTCACTTTTGAGAGAGTTCTCCTCTGAGACCTGATCTTTAGAGG

cccttttaaaaaaggggacttgcttaaaaaagaagtctagccacgattgtgtagagcagc

CCCTTTTAAAAAAGGGGACTTGCTTAAAAAAGAAGTCTAGCCACGATTGTGTAGAGCAGC

120 120 180 180

241 241 121

61

SQ SC	388888	7 RE E S S S S S S S	PR P	V58	000000000
Segu	encoded portion monitor also be	WPI; 9 Novel for de for de Claim This s be use	Home WO98 27 - 4 25 - 1 09 - 1 01 - 4	RESULT 1 V58544 V58544; DT 08-DEC- DE Prostat KW therapy	00000000000000000000000000000000000000
Sequence 385 BP;	ornd an by this of the progress conjugat	18-480805/41. human prostatecting and 1; Page 64; sequence reprint the met	Homo Sapiens.  WO9837418-A2.  27-AUG-1998; U03690.  25-FEB-1998; U-904809.  25-FEB-1997; US-904809.  15-AUG-1997; US-904809.  10-AUG-1997; US-904809.	standard; cDJ 1998 (first e tumour spec e tumour spec	28 7.3 6 28 7.3 6 27.6 7.2 1 27.6 7.2 5 27.4 7.1 2 27.2 7.1 2 27.2 7.1 1 27.2 7.1 1 27.2 7.1 1
86 A;	nogenic ence). L ate prot of, or t o a the	te specific treating pro 141pp; Engl esents a hum hod of the mprises con	0909	ge 985 85	3659 11110 11110 12193 12295 12295 12205 1205 11089 11134 1134
105 C;	protein, and the protein, and treat prostate therapeutic agent	te specific tumour protei treating prostate cancers 141pp; English. 141pp; English. resents a human prostate thod of the invention. The		clone P8	N60204 075977 V55399 V740400 074635 Q74635 N60375 N60375 V55343 V55343 V55389
94 G; 10	prostate pro hich binds to method can b e cancers. Th t for use in	protein and fra ancers tate tumour spe n. The method i		0. prostate cancer;	σ.
100 т;	immunogenic portion of a prostate protein (such as sequence). An antibody which binds to an immunogenic prostate protein, and the method can be used to detect, sion of, or treat prostate cancers. The antibody may sed to a therapeutic agent for use in therapy of prostate	ific tumour protein and fragments - useful gprostate cancers English. English. A human prostate tumour specific gene, and can the invention. The method is for detecting contacting a biological sample with an agent		er; detection;	Interferon-pseudo- Insulin receptor s Chimeric G-CSF-Flt LRP5 isoform 4 cDN POU domain transcr POU domain transcr Dog 32 kd alveolar Canine 32K alveolar Flt13 and IL-3 chi Flt11/IgG2b/G-CSF Flt3L/IgG2b/G-CSF

```
RESULT
V58544/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
V61287
ID V6
AC V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                                                                                                                 δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 385; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Prostate; cancer; the cancer state; cancer; the cancer state state
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Polypeptides comprising immunogenic portions of prostate proteins - used in a vaccine for the treatment of prostate cancer Claim 12; Page 61; 130pp; English.

The present sequence is a DNA which encodes an immunogenic portion of a prostate tumour protein. The encoded immunogen, or the DNA itse can be used as a vaccine for the treatment of prostate cancer. The was identified by analysis of a subtracted cDNA library with a normal subtracting a prostate tumour cDNA expression library with a normal tissue cDNA library.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cDNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-JAN-1999
                                                                                                                                       361
                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cctctcccagggccccagcctggccacacctgcttacagggcactctcagatgcccatac
                                                                                                                                                                     catagtttctgtgctagtggaccgt
                                                                                                                                                                                                                                                                 cctctcccagggccccagcctggccacacctgcttacagggcactctcagatgcccatac
                                                                                                                                                                                                                                                                                                                                                                                          ctgggcagtcttgcacatgagatggggctggtctgatctcagcactccttagtctgcttg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cccttttaaaaaaggggacttgcttaaaaaaagaagtctagccacgattgtgtagagcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTCGGACCAGCCACATCTCATGTGCAAGATTGCCCAGCAGACATCAGGTCTGAGAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ggtcggaccagccacatctcatgtgcaagattgcccagcagacatcaggtctgagagttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTACACACACTCCACTTGCCCCTTGTGAGACACTTTGTCCCCAGCACTTTAGGAATGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           actacacacactccacttgcccttgtgagacactttgtcccagcactttaggaatgctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tgtgctgtgctggagattcacttttgagagagttctcctctgagacctgatctttagagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCTTTTAAAAAAAGGGGACTTGCTTAAAAAAGAAGTCTAGCCACGATTGTGTAGAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGCTGTGCTGGAGATTCACTTTTGAGAGAGTTCTCCTCTGAGACCTGATCTTTAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               U03492.
US-020956.
US-806099.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  prostate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ?
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tumour clone vaccine; immu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 385; DB 1;
Pred. No. 3.5e-11
); Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          385
                                                                                                                                                                                                385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  immunogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ი
ი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  clone;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     immunogenic portion nogen, or the DNA itself,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

```
VECTOR NESCULT V61287, ID 200 COLOR 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PN W09837418-A2.

PP 27-AUG-1998; U03690.

PP 25-FEB-1998; US-904809.

PR 09-FEB-1999; US-904809.

PR 09-FEB-1997; US-806596.

PR 01-AUG-1997; US-806596.

PR 01-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 160
                          CDNA sequence of prostate prostate; cancer; tumour Homo sapiens.

27-AUG-1998.
25-FEB-1998; U03492.
25-FEB-1998; US-020956.
25-FEB-1997; US-086099.
01-AUG-1997; US-904804.
(CORI-) CORIA CORP.
Dillon DC, Xu J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          V58544 standard;
V58544;
08-DEC-1998 (fir
                                                                                                                                                                                                                                                                                                                                                                                        06-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                  V61287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                V61287 standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 actcctta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gacctgatctttagaggctgggcagtcttgcacatgagatggggctggtctgatctcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            atcaggtctgagagttccccttttaaaaaaaggggacttgcttaaaaaaagaagtctagcca 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACCIGATGICI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACAATCGTGGCTAGACTTCTTTTTAAGCAAGTCCCCTTTTTTAAAAGGGGAACTCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTCCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCAGGTCTCAGAGGAGAACTCTCTCAAAAGTGAATCTCCAGCACAGCACAGCTGCTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tch 21.8%;
al Similarity 64.5%;
160; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        998 (first entry)
tumour specific gene clone P8
tumour specific gene; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        385
                                                                                                                                                                                                                                                                                                                                              (first entry)
e of prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTGGGCAATCTTGCACATGAGATGTGGCTGGTCCGACCTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ą;
                                                                                                                                                                                                                                                                                                                       vaccine;
                                                                                                                                                                                                                                                                                                                                                    tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ₽₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 84; DB
Pred. No. 1e-1
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   clone P80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     105
                                                                                                                                                                                                                                                                                                                                                    clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               prostate cancer; detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
1e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          detect,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        can
```

,

SOCOCOPAT

Š

```
RESULT
X40340
ID X4
AC X4
AC X4
AC H1
KW H1
KW fc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Ma
Best Loc
Matches
Claim 1; Page 238-239; 398pp; English.

Claim 1; Page 238-239; 398pp; English.

X40251 to X40397 represent 5' expressed sequence tags (ESTs) for human secreted proteins, and encode the proteins given in Y11533 to Y11679, respectively. The proteins given represent the signal peptide and an N-terminal fragment of a secreted protein. The nucleic acid sequences can be used for producing secreted human gene products. They can also be used to develop products for diagnosis and therapy. The proteins obtained may have cytokine activity, cell proliferation/differentiation activity, haematopoiesis regulating activity, tissue growth regulating activity, reproductive hormone regulating activity, chaematopoiesis regulating activity, chaemotactic/ chemokinetic activity, haemostatic and thrombolytic activity, receptor/ ligand activity, anti-inflammatory activity, tumour inhibition activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Polypeptides comprising immunogenic portions of prostate proteins used in a vaccine for the treatment of prostate cancer Claim 12; Page 61; 130pp; English.

The present sequence is a DNA which encodes an immunogenic portion of a prostate tumour protein. The encoded immunogen, or the DNA itself, can be used as a vaccine for the treatment of prostate cancer. The DNA was identified by analysis of a subtracted cDNA library obtained by was identified by analysis of a subtracted cDNA library obtained by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human secreted protein 5. EST SEQ ID NO:127.

Human; secreted protein; EST; expressed sequence tag; diagnosis; forensia; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematopoiesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostatic; thrombolytic; anti-inflammatory; tumour inhibition; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              subtracting a prostate tumour cDNA expression library with tissue cDNA library.
Sequence 385 BP; 86 A; 105 C; 94 G; 100 T;
                                                                                                                                                                                                                                                                              cDNA libraries derived from liver,
thyroid and pancreas tissue
Claim 1; Page 238-229; 398pp; Engl:
X40251 to X40397 represent 5' expre
                                                                                                                                                                                                                                                                                                                                                                                                                      Duclert A, Dumas Milne Edwards J, WPI; 99-153700/13. P-PSDB; Y11622.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-FEB-1999.
31-JUL-1998; IB1233.
01-AUG-1997; US-904468.
                                                                                                                                                                                                                                                                                                                                                                                       New nucleic acids encoding human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9906439-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      X40340;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             X40340 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GEST )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .6-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atcaggtctgagagttccccttttaaaaaaggggacttgcttaaaaaagaagtctagcca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTCCTAA 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       actcctta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACCTGATGTCT - - -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gacctgatctttagaggctgggcagtcttgcacatgagatggggctggtctgatctcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACAATCGTGGCTAGACTTCTTTTTTAAGCAAGTCCCCTTTTTTAAAAAGGGGAACTCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cgattgtgtagagcagctgtgctgtgctggagattcacttttgagagagttctcctctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCAGGTCTCAGAGGAGAACTCTCTCAAAAGTGAATCTCCAGCACAGCACAGCTGCTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                160;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENSET.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 64.5
50; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTGGGCAATCTTGCACATGAGATGTGGCTGGTCCGACCTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ΒP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 84; DB Pred. No. 1e-1 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                            secreted proteins - obtai
r, lung, large intestine,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lacroix B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                          obtained from
                                                                                                                                                                                                                                                                                                                                                                    colon,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a normal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              œ
``
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ν
```

믔 QY D, Qy B QУ 밁 δÃ

Ş

50

aggaatgctgaggtcggaccagccacatctcatgtgccaagattgcccagcagacatcagg

Query Match Best Local Matches 4

l Similarity 47; Conserv

Conservative

9.48;

9: Score 36.2; D 9: Pred. No. 0.00 0; Mismatches

e 36.2; DB 1; L ... No. 0.0099;

Length

0;

Gaps 109

0;

Match

```
8888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
CC x40251 to x40397 represent 5 expressed sequence tags (ESTs) for human CC secreted proteins, and encode the proteins given in Y11533 to Y11679, CC respectively. The proteins given represent the signal peptide and an CC N-terminal fragment of a secreted protein. The nucleic acid sequences CC can be used for producing secreted human gene products. They can also CC be used to develop products for diagnosis and therapy. The proteins CC obtained may have cytokine activity, cell proliferation/differentiation CC activity, haematopoiesis regulating activity, tissue growth regulating CC activity, reproductive hormone regulating activity, chemotactic/ CC ligand activity, anti-inflammatory activity, tumour inhibition activity or or other activity, anti-inflammatory activity, tumour inhibition activity and corresponding procedures. The sequences can also be used for obtaining corresponding promoter sequences. The nucleic acids encoding the signal peptide can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a membrane, or importing a polypeptide into a cell.

Sequence 429 BP; 78 A; 132 C; 109 G; 108 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query
Best I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or other activities. The products can be used in forensic, gene therapy and chromosome mapping procedures. The sequences can also be used for obtaining corresponding promoter sequences. The nucleic acids encoding the signal peptide can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a membrane, or importing a polypeptide into a cell.

Sequence 429 BP; 78 A; 132 C; 109 G; 108 T;
                                                                                                                                                                                                                                                                                                                                           thyroid and pancreas tissue
Claim 1; Page 238-239; 398pp; English.
x40251 to x40397 represent 5; expresse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GEST ) GENSET.
Duclert A, Dumas M.
WPI; 99-153700/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human secreted protein 5 EST SEQ ID NO:127.

Human secreted protein; EST; expressed sequence tag; diagnosis; forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematopoiesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostatic; thrombolytic; anti-inflammatory; tumour inhibition; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                 New nucleic acids encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-JUL-1998; IB1233
01-AUG-1997; US-904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9906439-A2.
                                                                                                                                                                                                                                                                                                                                                                                                           cDNA libraries derived from liver,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      P-PSDB; Y11622.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               X40340;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gcctctcccagggccccaggcctggccacacctgcttacagggcactctcagatgccca 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGGGCGTTCTTGCCGATAAGTTGGGGATGGTTGGACCTGAGCACCTCTTGGTCAGCTG 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCTCTCCCAGGGCTCCAGGCTACCCACACCTGCTTGCAGTGCGACCTCGGTTGCCCA 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dumas Milne Edwards
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-904468.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19.0%;
76.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  429
                                                                                                                                                                                                                                                                                                                                                                                                    human secreted proteins - obtained fr
m liver, lung, large intestine, colon,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         J, Lacroix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73.2;
No. 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
1.4e-15;
nes 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                 obtained from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
```

```
γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pr parasitic nematodes esp. root-knot nematodes of potato plants
pr parasitic nematodes esp. root-knot nematodes of potato plants
CC laim 7; Page 15-16; 35pp; English.

CC The nucleotide sequence of the novel alkaline serine protease isolated
CC from the nematode egg-parasitic fungus Paecilomyces lilacinus. The gene
CC encodes a protease of 33.5 kD which has an isoelectric point of pH10.
CC The protease has optimal activity at pH10.3 and 60 deg. C. The gene was
CC amplified from P. illacinus genomic DNA using the primers (078234-5) based
CC sequences which are conserved among subtilisin-like protease and a.a.
CC sequences which are conserved among subtilisin-like proteases. The
CC sequences include regions at the N-terminus of the proteases?
CC around the active site histidine residue (R65937). The resulting 240 bp
CC fragment was used to screen a P. illacinus cDNA library in lambda ZAP to
CC obtain the full length gene encoding the protease. The protease is used
CC nematodes on plants and plant cells. The gene encoding the protease can
CC be used to control plant parasitic nematodes by controlling the action of the
CC nematodes on plants and plant cells. The gene encoding the protease can
CC be used to control plant parasitic cyst, root-knot or lesion nematodes
CC especially root-knot nematodes e.g. those in the Heteroderidae family
CC which include the potato and sugar beet cyst nematodes.
CC sequence 1336 BP; 307 A; 446 C; 318 G; 265 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
    다
다
다
다
다
                                                               RESULT
V52306
                                                                                                                                                                                    Ş
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POKKWEDDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                맑
V52306 standard; DNA; 4185 BP
V52306;
23-OCT-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-MAY 1993, EP-107233.

(REPL-) RES INST PLANT PROTECTION.

Bonants PJM, Den Belder E, Fitters PFL, Waalwijk C;

WPI; 94-343307/43.

Use of protease from Paecilomyces lilacinus - to control plant

Use of protease from Paecilomyces lilacinus of potato plants
                                                                                                                                                                                                                                                                                                                                                                                             1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-NOV-1994.
04-MAY-1993; 107233.
04-MAY-1993; EP-1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Serine protease; nematode; egg; parasite; fungus; wheat; cabbage; protease; primer; amplify; PCR; alkaline protease; parasitic nematode; subtilisin like protease; plant; plant cell; cyst; root knot; lesion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Paecilomyces lilacinus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q78233 standard; DNA; 1336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Heteroderidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alkaline serine protease
                                                                                                                                                                                                                                                                                                                                                                                                                                 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             110
                                                                                                                                                                                                                                                                                                            987
                                                                                                                                                  867
                                                                                                                                                                                      314
                                                                                                                                                                                                                              927
                                                                                                                                                                                                                                                                    254
                                                                                                                                                                                                                                                                                                                                                     194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .0-JUL-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match
                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                             ggggacttgcttaaaaaagaagtctagccacgattgtgtagagcagctgtgctgtgctgg 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTGA 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tctga 114
                                                                                                                                                CGAAG
                                                                                                                                                                                    cccag
                                                                                                                                                                                                                                                                                                                                                                                         GAGGACGTTCTTAGTAAGAAAGGGTCTGGATGCGCTTGCAGAGCGCCTGGGCGCGCGGGA 988
                                                                                                                                                                                                                              TACCAGAGATGGTGTTGGTAGTGCCACCGAACCAGGTGGACAGAATGTTGCTACCCGGGG
                                                                                                                                                                                                                                                                cacatgagatggggctggtctgatctcagcactccttagtctgcttgcctctcccagggc
                                                                                                                                                                                                                                                                                                                                                agattcacttttgagagagttctcctctgagacctgatctttagaggctgggcagtcttg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAGGTGCTCAGGTCCAACCATCCCCAACTTATCGGCAAGAACGCCCTGCACTGATCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                863
                                                                                                                                                                                      318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   potato; sugar beet; cyst nematode; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene from Paecilomyces lilacinus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 36.2; DB Pred. No. 0.016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ۲;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1336;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                              398
                                                                                                                                                                                                                                                                                                            928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

```
V231277
ID V231277
ID V231277
AC V2

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes a computer readable medium which has CC the nucleotide sequences SEQ ID NO:1 to 391 (V52134 to V52524) recorded CC on it, or a representative fragment or a sequence at least 95% identical CC to SEQ ID NO: 1 to 391. The nucleotide sequences deploted in SEQ ID NO:1 to 391 (V52134 to V52524) are genomic fragments from Streptococcus CC pneumoniae. The present invention also describes an isolated nucleic acid complete encoding a homologue of any of the fragments of the S. pneumoniae CC genome (SEQ ID NO:1 to 391) where the nucleic acid molecule is produced CC by a process comprising: (a) screening a genomic DNA library using as a CC probe a target sequence defined by any of the sequences in SEQ ID NO:1 to 391, identifying members of the library which contain sequences CC that hybridise to the target sequence and isolating the nucleic acid collecules from the members of the library which contain sequenced CC fragment of the S. pneumoniae genome to prime the amplifying nucleic acid molecules whose nucleotide CC fragment of the S. pneumoniae genome to primers derived from the CC isolating the amplified sequences. The computer readable medium can be used in a computer-based system for identifying fragments of the S. pneumoniae genome. Products from the present CC invention can be used in diagnosis kits and assays, and pharmaceutical compositions and vaccines for S. pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 73
                                   Bos sp.
Key
CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (HUMAN GENOME SCI INC.
Barash SC, Choi GH, Dillon PJ, Dougherty BA, Fannon
Kunsch CA, Rosen CA;
WDT: GR-27000 CA;
                                                                                                                                                                 CDNA of protein with Rho protein-combining and kinase activity. Rho protein-binding activity; protein kinase activity; inhibitor; smooth muscle fibre formation; smooth muscle contraction; circulatory disease; treatment; tumour formation; metastasis inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Computer-readable medium with recorded Streptococcus pneumoniae polynucleotide sequences - useful in diagnostic kits and assays,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Streptococcus pneumoniae genome fragment SEQ ID NO:173. Streptococcus pneumoniae; S. pneumoniae; genome; diagnosis; assay; computer readable medium; vaccine; pharmaceutical composition; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Streptococcus pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-OCT-1997; U19588.
31-OCT-1996; US-029960
                                                                                                                                         autoimmune
                                                                                                                                                                                                                                                                                                          14-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 1101-1103; 1409pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pharmaceutical compositions and vaccines for Streptococcus
                                                                                                                                                                                                                                                                                                                                                                             723127 standard; cDNA; 5053 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     245 gcagtcttgcacatgagat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   185
                                                                                                                                                                                                                                                                                                                                                                                                                                                ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ctgtgctggagattcacttttgagagagttctcctctgagacctgatcttttagaggctgg 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAGTTATCCAGATTCGCT 1775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAATGCTGGGGTTTCTTTTGCCAGTTCATTCTGCAACTGAACCTGACCTTTTGAGATAGA 1756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTTAAAATCGGTCTATCATCATAAGAAAAAGATACTTCCTCTAGTCTAAAGAGTGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tttaaaaaaggggacttgcttaaaaaagaagtctagccacgattgtgtagagcagctgtg 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                     disease; platelet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                          (first entry)
                                      Location/Qualifiers
1. .4167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 33.4;
Pred. No. 0.
                                                                                                                                     aggregation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 4185;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1696
```

```
밁
                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                           Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 87-13/3.,
P-PSDB; P70611.
New human skin fibroblast collidation of treating hy intervertebral disc disease
'S Claim 2; Fig 2; 10pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 66
                                                                                               20-MAY-1987:
11-NOV-1986: 026914.
12-NOV-1985: US-797262.
(MONS ) MONSANTO CO.
(MONS ) UNIV OF WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           J10113187-A.
06-MAY-1998.
20-NOV-1996;
23-AUG-1996;
20-NOV-1995;
20-NOV-1995;
05-JAN-1996;
26-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bovine and human Rho protein-binding protein kinase - used to develop products for treatment of smooth muscle disorders, circulatory disease, cancer and autoimmune disease Disclosure; Pages 39-44; 66pp; Japanese.

The present sequence encodes a protein that has Rho protein-binding activity and protein kinase activity. Inhibitors of the Rho-binding protein kinase can be used to inhibit smooth muscle fibre formation and smooth muscle contraction. Other applications of the Rho protein-binding agent and its products are as a circulatory disease treating agent or a platelet aggregation inhibitor. Sequence 5053 BP; 1816 A; 879 C; 1092 G; 1266 T;
                                                                                                                                                                                                               Homo
Key
                                                                                                                                                                                                                                                                     N70956 standard; cDNA; N70956;
                                                                                                                                                                                                                                                                                                                                                                                  4404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (KIRI ) KIRIN BREWERY KK. WPI; 98-315475/28. P-PSDB; W56473.
                                                                                         Eisen
                                                                                                                                                                                                                         Sequence of human Enzyme; protease; Homo sapiens
                                                                                                                                                                                                                                                                                                                                      4344
                                                                                                                                                                                                                                                                                                                                                                                                                             4464
                                                                                                                                                           GB2182665-A.
                                                                                                                                                                               polya_signal
                                                                                                                                                                                                                                                            15-APR-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                            316
                                                                                                                                                                                                                                                                                                                                                                                                                                                   196
                                                                                                                                                                                                                                                                                                                                                                                                        256
                                                                            n AZ, Goldberg GI, Bauer
87-137944/20.
                                                                                                                                                                                                                                                                                                                                      C 4344
                                                                                                                                                                                                                                                                                                                                                            ဂ
                                                                                                                                                                                                                                                                                                                                                                                CATGATATTCTTATTCAACCAATCACTGTTGGTTCAACTTGTTGCTCCAAAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                             catgagatggggctggtctgatctcagcactccttagtctgcttgcctctcccagggccc
                                                                                                                                                                                                                                                                                                                                                                                                                          ATGCAATGTAGTGAGTGATGCTAGGAGAGCTTTATGGAATAAGTCTGGAAGAGTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                           attcacttttgagagagttctccctctgagacctgatctttagaggctgggcagtcttgca
                                                                                                                                                                                                                                                                                                                                                           316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; JP-241061.
; JP-325129.
; JP-017150.
; JP-131206.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                           (first
             10pp; English was prepd. by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3889. .
/*tag=
                                                                                                                                                                               /*tag=
1942.
                                                                                                                                                                                                     69.
                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note=
                                                                                                                                                                                                                                              st entry)
                                                                                                                                                                                                                                      SS.
                                                                                                                                                                                                 .1478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8.6%;
                                                                                                                                                                               .1947
                                                                                                                                                                                                                                              collagenase
                                                                                                                                                                                                                                                                                1970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "the amino ac
nucleotides
                                                                                                                                                                                          Ω
                                                                                                                                                                     Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence"
                                            collagenase -
ng hypertropic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 33; DB
Pred. No. 0.35
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                          EA;
              using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acid
es do
                                                                                                                                                                                                                                               CDNA
              normal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  residues encoded by these not appear in the protein
                                             is obt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1
0.35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ';;
              adult
                                             obtd. by recombinant ars, keloids and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 5053;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                4345
                                                                                                                                                                                                                                                                                                                                                                                                                           4405
                                                                                                                                                                                                                                                                                                                                                                                                     315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

24 59 59 59

264 286 204

teettagtetgettgeeteteecagggeee

324,

226

265

TGTTTTTATTGGAAGCTGCTCGTCGAAGCGGCTGACCACCGGCCTGGACCCATTCCACCGG

```
ន្តន្តន្តន
          Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                  Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                       28-JUN-1991; U04624.
29-JUN-1990; US-547090.
(UNMI) UNIV OF MICHIGAN.
COllins FS, Wallace MR, Ma
WPI; 92-041568/05.
                                                                                                            derived amino acid sequences and probes for screening NFI in early stages of disease
Claim 22; Page 39; 122pp; English.
This is the cDNA sequence of the von Recklinghausen neurofibromatosis (Nf1) gene. The gene, its product, probes and antibodies to its product can be used in hybridisation and immunological assays to screen for the presence of a normal or defective Nf1 gene or gene product. Functional assays to measure levels of gene function can also be used for diagnosis or to monitor treatment. Patient therapy through supplementation with the normal Nf1 product which can be produced by recombinant techniques is also possible. In addition the disease may be cured or controlled through gene therapy. See also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           fibroblasts to give conditioned medium, and procollagenase purified. Protein sequencing, primer extension reaction and construction of a cDNA library were carried out. Human skin fibroblast protein is pref. glycosylated at Asn 120 and Asn Sequence 1970 BP; 588 A; 409 C; 443 G; 530 T;
                                                                                                                                                                                                                                                   DNA sequences to von-Recklinghausen neurofibromatosis DNA sequences to von-Recklinghausen neurofibromatosis
                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                       WO9200387-A.
09-JAN-1992.
                                                                                                                                                                                                                                                                                                                                                                                                                             gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                          Υon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q20602;
                                                                                                                                                                                                                                                                                P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nf1 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-MAY-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q20602 standard;
           166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   351
                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81 atgtgcaagattgcccagcagacatcaggtctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11
                                                       Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match
                                                                                                                                                                                                                                                                                                                                                                                                                                       Recklinghausen
attgtgtagagcagctgtgctgtgctggagattcactttttgagagagttctcctctgaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ccttgtgagacactttgtcccagcactttaggaatgctgaggtcggaccagccacatctc
                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTGATGTGGCTCAGTTTGTCCTCACTGAGGGAAACCCTCGCTGGGAGCAAACACATCTG 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGTACAGGATTGAAAATTACACGCCAGATTTG
                                                                                                       and
                                  . Similarity
75; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 58.:
54; Conservative
                                                                                                                                                                                                                                                                                R22268
                                                                                            Q20604.
8937 BP;
                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first
                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers 190. .8646
                                                                                                                                                                                                                                                                                                                                                                              /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                        neurofibromatosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                entry)
                                            7.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8937
                                                                                            2595
                                                                                                                                                                                                                                                                                                       Marchuk
                                                                                                                                                                                                                                                                                                                                                                              D
                               Score 30; DB
Pred. No. 4.5;
0; Mismatches
                                0
                                                                                            ?
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
Pred.
                                                                                                                                                                                                                                                                                                      DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                            2015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30.6; DI
                                                                                                                                                                                                                                                                                                      Andersen
                                                                                                                                                                                                                                                                                                                                                                                                                                        disease;
                                                                                          Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BB
                                                       ۲.
                                                                                            1880
                                75;
                                                                                                                                                                                                                                                                                                      LB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ٠.
                                                                                                                                                                                                                                                                                                                                                                                                                                        autosomal
                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           reaction and
. Human skin
120 and Asn
3; 530 T;
                                                                                                                                                                                                                                                                                                      Gutmann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                Indels
                                                                                          <u>ن</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                        8937
                                                                                                                                                                                                                                                     gene
                                                                                            2447
                                                                                                                                                                                                                                                      'n,
                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                     and
early
                                                                                            Η.
                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

```
RESULT
T22243
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                            δδ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                           吕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             largely homologous to yeast IRA protein (inhibitory regulators of the ras-cAMP pathway) and mammalian GAP (ras p21 GTPase activating proteins). The hNF gene is the human neurofibromators type 1 (NFI) gene, somatic mutations of which in the region spanning nucleotides 3809-4888 of the NFI cDNA, in human tumours, indicates defective ras regulation. Therefore a tumour found to contain a somatic mutation in the NFI gene can be treated using ras activity as the focus, whereas a tumour not containing such a mutation will require other courses of treatment. A tumour containing a somatic mutation in the NFI gene can be treated by inactivating ras p21, also as GAP p120 is present, but apparently latent, GAP p120 activation would be beneficial and finally inhibition of GDP/GTP exchange would also counteract the loss of hNF or hNF GAP related domain activity.

Sequence 10706 BP; 2993 A; 2454 C; 2410 G; 2849 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-FEB-1997.
12-JUL-1990; US-551531.
12-JUL-1990; US-551531.
16-APR-1993; US-047088.
28-MAR-1995; US-411389.
(UTAH) UNIV UTAH RES FOUND.
(UTAH) UNIV UTAH RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                      ches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human neurofibromatosis type 1 (NF1) cDNA.
Human neurofibromin; yeast; IRA; protein; inhibition; GTPase;
regulation; ras-cAMP; pathway mammallan; GAP; ras p21; gene;
activation; neurofibromatosis; type 1; NF1; somatic; mutation;
              Gene signature; messenger RNA; mRNA; relative abundance; frequency; human; cloning; mapping; non-biased library; diagnosis; detection; cell typing; abnormal cell function; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Detection of defective ras regulation at the neurofibromatosis to gene in tumour - by detecting mutation in specified region of Claim 1; Columns 17-38; 35pp; English.

The present sequence encodes human neurofibromin (hNF), which is
                                                                13-SEP-1996 (first entry)
Human gene signature HUMGS03814
                                                                                                    T22243 standard; cDNA to mRNA; T22243;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US5605799-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tumour; detection; diagnosis; prognosis; defective; treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                T46941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 97-153572/14.
P-PSDB: W13280.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                [46941 standard; cDNA; 10706
                                                                                                                                                                                                          301
                                                                                                                                                                                                                                            286
                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                226
                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                166
                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                            cctgatctttagaggctgggcagtcttgcacatgagatggggctggtctgatctcagcac
                                                                                                                                                                                                                                                                                                                                                                       attgtgtagagcagctgtgctgtgctggagattcacttttgagagagttctcctctgaga 225
                                                                                                                                                                                                          CCTGTGCGCGGCCATGTCCTCCCCGCGGCC
                                                                                                                                                                                                                                                                            TGTTTTTATTGGAAGCTGCTCGAAGCGGCTGACCACGGCCTGGACCCATTCCACCGG
                                                                                                                                                                                                                                                                                                                                              ATTGATTAGACATTCCTTGTTGTGCTCAGTACTGACTTTGGTATGTGTGTTCTGCTGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                Similarity 50.075; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers 287. .8743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /product- neurofibromin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag-
                                                                                                                                                                                                                                                                                                                                                                                                                                  7.8%;
50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                  Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВP
                                                                                                                                                                                                                                                                                                                                                                                                                core 30; DB red. No. 4.8; Mismatches
                                                                                                                    ВP
                                                                                                                                                                                                          272
                                                                                                                                                                                                                                        315
                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                    œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                  75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 10706;
                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SS
                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                              362
                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

```
RESULT
Q12759/c
ID Q12759 SL
Q12759;
77-OCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
  CC A single-stranded DNA (or its complementary strand or the corresp. CC double-stranded DNA) which comprises one of the 7837 "GS" sequences given in T19001-T26837 and which is able to hybridise to part of thuman genomic DNA, cDNA or mRNA is claimed. The GS (Gene Signature) sequences were obtained from 3'-directed cDNA libraries prepared from various human tissues; synthesis of cDNA was initiated from the 3'-cuntranslated sequence is unique to a particular mRNA species, almost call the 3'-oriented cDNAs hybridise with specific mRNAs. Each library is constructed so as to reflect accurately the relative abundance of different mRNAs in the particular tissue from which it was derived. The appearance frequency of a given GS in a cDNA library can be computed (ssp. using primers and probes derived from the GS sequences) as a means of diagnosing abnormal cell function or for recognising different cell types.

Sequence 212 BP; 64 A; 54 C; 43 G; 48 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W09514772-A1.
01-JUN-1995.
11-NOV-1994;
12-NOV-1993;
 misc_signal
                                                                                                                                                                                                            exon
                                                                                                                                                                                                                                                exon
                                                                                                                                                                                                                                                                                                                       P40 genomic
T cell growt
                                    misc_signal
                                                                     misc_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matsubara K, Okub
WPI; 95-206931/27.
                                                                                               signal_peptide
                                                                                                                                     exon
                                                                                                                                                                          exon
                                                                                                                                                                                                                                                                                                Кеy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Identifying gene signatures in 3'-directed human cDNA library for diagnosis of abnormal cell function, by preparing cDNA the
                                                                                                                                                                                                                                                                                                             OMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   reflects relative abundance of corresp. mRNA in specific human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MATS/) MATSUBARA K.
(OKUB/) OKUBO K.
                                                                                                                                                                                                                                                                                                                                                 17-OCT-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                          92
                                                                                                                                                                                                                                                                                                                                                                                                                                  82 TGTCCAGCTGCTGTCAGGTCTGATAGTCCTCTGCTAAAACAACACGATTTACATAAAAA 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                tgcccagcagacatcaggtctgagagttccccttttaaaaaaaggggacttgcttaaaaaa 151
                                                                                                                                                                                                                                                                                                            sapiens.
                                                                                                                                                                                                                                                                                                                      growth factor; AIDS; cytokine;
                                                                                                                                                                                                                                                                                                                                                                        standard; DNA; 4382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Page 1081;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    J01916.
JP-355504.
                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Okubo K;
/label=
394. .39
                                   /label - C
                                                                        /*tag= I
                                                                                                                                                                                                                                 /number= 1
1022. .1057
/*tag= b
                                                                                                                                    /number= 4
4099. .4218
                                                                                                                                                                          2464.
                                                                                                            /number-
                                                                                                                       /*tag= e
                                                                                                                                                                                    /*tag= c
/number= 3
                                                                                                                                                                                                       1143. .1175
                                                                                                                                                                                                                        /number=
                                                                                                                                                                                                                                                                                               ocation/Qualifiers
                                                             /*tag=
                                                                                                                                                            *tag=
                                                                                                                                                                                                                                                                        /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2245pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7.7%;
                                                                                                . 849
  l= C-rich_motif
                                                                                                                                                                       . 2595
                                               G-rich
                                                                                                                                                                                                                                                                        þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 29.6; DI
Pred. No. 1.2;
O; Mismatches
                                             _mot1f
                                                                                                                                                                                                                                                                                                                      T helper cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cDNA that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          e.g
```

ij

```
밁
                    õ
                                          D
                                                              γ
                                                                                                                                               ŦŢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                        Matches
                                                                                                                                                                           Nucleic acid encoding for P40 T-cell growth factor - for patients with AIDS or compromised immune systems, also allows increased prodn. of other cytokine(s).

Claim 2; Fig 14; 122pp; English.

The sequence was obtd. from a clone, lambda H40.3al, isolated from a genomic library using a murine P40 cDNA clone as a probe. The sequence, or the cDNA sequence obtd. using the sequence, can be inserted into a vector for expression of P40 in a host organism. The protein is useful for stimulating the proliferation of certain subsets of Thelper cells e.g. in AIDS patients or immune
                                                                                                                                                                                                                                                                                           08-JAN-1991; U00145.

08-JAN-1990; US-462158.

(RESE ) RES CORP TECHN INC.

Vansnick J, Uyttenhove C, Simpson RJ;

WPI; 91-238026/32.

P-PSDB; R13217.
                                                                                                                                              compromised patients
See also Q12760, and
Sequence 4382 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_rna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_signal
                                                                                                                                                                                                                                                                                                                                                                               WO9110738-A.
                                                                                                                                                                                                                                                                                                                                                                                                   polya_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_rna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_rna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_rna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_rna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_rna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_rna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tata_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_signal
                      147
                                             476
416 TATAATATAGCCAGTCATGGGTGT
                 aaaaagaagtctagccacgattgt 170
                                          AATACTTTCCATGAACGCCCAGGTCTGTATTTTCCCTTTTTACATTATGGGAAATGCTGA 417
                                                          aagattgcccagcagacatcaggtctgagagttccccttttaaaaaaaggggacttgctta 146
                                                                                        50;
                                                                                      Similarity 59.5
50; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                   /note= "reduces mRNA stability"
4357. .4362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /label- pc
/note- "z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     element"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= i
/label= C-rich_motif
                                                                                                                                           and Q13660-Q13663.
BP; 1210 A; 922
                                                                                                                                                                                                                                                                                                                                                                                                                                                          /label= ATTTA motif
/note= "reduces mRNA stability"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag- j
/note= "interferon regulatory factor-1 binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      note= "reduces mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /label-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag= k
/note= "AP-1
                                                                                                                                                                                                                                                                                                                                                                                         /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                          'label= ATTTA motif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'label-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'note= "reduces mRNA stability"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'label= Alu_sequence
1836. .3875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .abel-
                                                                                                  7.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Z DNA; enhancer-like activity."
.4235
                                                                                                                                                                                                                                                                                                                                                                                                                                               .4284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .4244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTTA motif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            transcription_start_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTTA motif
                                                                                     Score 29.6; DB
Pred. No. 4.4;
0; Mismatches
                                                                                       <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     binding site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      stability'
                                                                                                                                               Ç;
                                                                                                             DB
                                                                                                                                               904
                                                                                                           1;
                                                                                       34;
                                                                                                                                              ဌ
                                                                                                           Length 4382;
                                                                                       Indels
                                                                                                                                              1346
                                                                                       0
                                                                                     Gaps
                                                                                       0
```

```
RESULT 15
V49653
AC V49653
AC V49653
DT 23-OCT
DE Human
KW nervou
KW autoan
OS HOMO S
PN W09830
PD 16-JUL
PR 09-JAN
PA (DEKR-
PI WOIL; 9
PT PROTEI
CC This n
CC Cytate
CC cytate
CC Gerive
CC Gerive
CC Gerive
CC Gerotai
CC autoar
SO Sequer
                                  δÃ
                                                                            밁
                                                                                                              ş
                                                                                                                                                        밁
                                                                                                                                                                                          γQ
                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                  proteins containing scavenger receptor, cysteine rich domain-
useful for diagnosis and treatment of tumours
Disclosure; Fig Sa; S4pp; German.
This nucleotide sequence contains a fragment of a gene which is capable
of encoding a protein which contains a SRCR (scavenger receptor,
cysteine-rich) domain. The gene and encoded protein can be used to
diagnose or treat tumours, particularly of the nervous system
(medullo-blastoma or glioma) or breast. The DNA sequence and probes
derived from it, are used to identify genes that express SRCR-domain
containing proteins, to determine the form in which these proteins exist
and to assess the significance of individual forms on cellular
properties. The protein can be used to detect the presence of
autoantibodies and antibodies which regulate its expression.
Sequence 7379 BP; 1884 A; 1673 C; 1554 G; 2268 T;
                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-JAN-1998; D00096.
18-JUL-1997; DE-030997.
09-JAN-1997; DE-000519.
(DEKR-) DEUT KREBSFORSCHUNGSZENTRUM
MO11enhauer J, Poustka A;
WPI; 98-399136/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human SC1 DNA.
Scavenger receptor cysteine rich domain; SRCR; diagnosis; treatment;
nervous system; medullo-blastoma; glioma; breast; detection; SC1;
  6966
                                                                            6906
                                                                                                                                                        6846
                                                                                                                                                                                                                                  6786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9830687-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          V49653 standard; DNA; 7379
                                                                                                                  281
                                                                                                                                                                                            221
                                                                                                                                                                                                                                                                    161 ccacgattgtgtagagcagctgtgctgtgctggagattcacttttgagagagttctcctc 220
CTCCTTCCTCTTGCTC
                                                                                                                                                                              tgagacctgatctttagaggctgggcagtcttgcacatgagatggggctggtctgatctc 280
                                    gcactctcagatgccc 356
                                                                          GTGGGTGCCAAGACCTGGGGCATGTCTCAAGTGCCCACTCGGCCAATCCCAGCTGTCATT 6965
                                                                                                              agcactccttagtctgcttgcctctcccagggccccagcctggccacacctgcttacagg 340
                                                                                                                                                    TGAGGTCACAGAGCAAACGCCTGCCTTGTCGAACGCAGGAATGCCGGGGGGACAGGAGAC
                                                                                                                                                                                                                                CCCTGGTGGGGTTGGCCAGTTCTCCTCTGCTGCTGTTGGCTAGTTGAGGCTGAGCACAGC 6845
                                                                                                                                                                                                                                                                                                            92; Conserv
                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                              7.7%;
6981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP
                                                                                                                                                                                                                                                                                                        Score 29.6; DB Pred. No. 5.6; 0; Mismatches
                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                BB
                                                                                                                                                                                                                                                                                                            104;
                                                                                                                                                                                                                                                                                                                                              ۲.
                                                                                                                                                                                                                                                                                                                                                Length 7379;
                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    capable
                                                                                                                                                      6905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    exist
```

0

Search completed: June 19, 2000, 18:55:47 Job time: 4042 sec